E-waste Inspection and Enforcement Manual

Developed in the framework of the SBC E-waste Africa project

BASEL CONVENTION

Preface

In 2009 the Secretariat of the Basel Convention (SBC) launched the E-waste Africa project. This programme (2009 – 2012) aimed to build local capacity to address the flow of electrical and electronic equipment for re-use and electrical and electronic waste – "e-waste"- in selected African countries and augment the sustainable management of resources through the recovery of materials in e-waste. The activities under the programme were completed in 2012.

The programme consisted of four components:

- Conducting a study on flows in used and end-of-life e-products imported into Benin, Côte d'Ivoire, Ghana, Liberia and Nigeria from European countries;
- Developing national assessments on used and end-of-life equipment and on national environmentally sound management plans;
- Preparing a socio-economic study on the e-waste sector in Nigeria and a feasibility study on international co-operation between African small and medium enterprises (SMEs) and European recycling companies;
- Developing an enforcement programme in Benin, Egypt, Ghana, Nigeria and Tunisia in order to prevent illegal transboundary movements of e-waste and to improve the control and monitoring of these movements. The component IV included the preparation of this inspection and enforcement manual.

The programme has been funded through the generous support of the European Commission; the governments of Norway and the United Kingdom of Great Britain and Northern Ireland; and the Dutch Recyclers Association (NVMP).

The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) together with the Basel Convention Coordinating Centre for Training and Technology Transfer for the African Region (BCCC-Nigeria) have been responsible for the implementation of component IV of the programme.

Under this component a training curriculum for port and customs authorities, governmental officials and accreditation authorities has been developed by IMPEL, the BCCC-Nigeria and SBC, including training workshops in the participating countries and an exchange programme for officials of these countries in Europe.

Furthermore, as a part of component IV, a communication tool for exchanging information on shipments of used electrical and electronic equipment (UEEE) and waste electrical and electronic equipment (WEEE or e-waste) between exporting and importing states in Africa and Europe was developed.

Experience gathered during the execution of component IV contributed to the preparation of this E-waste Inspection and Enforcement Manual.

When compiling this manual, the authors assumed that the users possess basic knowledge of the Basel Convention and have access to the 'Basel Convention Training Manual on Illegal Traffic', published by the SBC (available here: http://www.basel.int/legalmatters/illegtraffic/trman-e.pdf).

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Disclaimer
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Acknowledgements

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How to use this manual

This manual aims to offer practical guidance and background information to regulatory and enforcement officers who deal with the transboundary movements of used electrical and electronic equipment (UEEE) and electrical and electronic waste (e-waste). While actions of both export and import countries are important to effectively enforce the Basel Convention, including in relation to e-waste, the manual focuses primarily on countries of import. This is due to the fact that the project aims to support capacity building in the countries concerned which are principally countries of import. As seaports are by far the main points of entry of shipments of UEEE and e-waste into the African continent, this manual focuses on capacity building of and improved collaboration among enforcement and regulatory officers whose daily work is related to African seaports.

The first two chapters contain general information. They provide background information and introduce key issues related to e-waste and to the international efforts to combat illegal traffic in e-waste.

Chapter one addresses the so-called "e-waste issue" as a matter of global importance. Both the economic benefits and the environmental harm are highlighted. This chapter also gives a brief overview of legislation and regulations in the fields of waste classification, waste management and waste movements. Finally an enforcement structure is introduced.

Chapter 1
An introduction to the e-waste issue

In **chapter two** the importance of communication and collaboration between the involved enforcement agencies is stressed. Key issues, both at national and international levels are discussed, such as the use of formal communication and collaboration agreements. Also various existing international structures for the exchange of enforcement information are introduced. The establishment of an EU-African Enforcement Network is detailed with the aim of combating illegal traffic of e-waste more effectively.

Chapter 2
Communication and collaboration

The chapters three, four and six provide information on procedural and technical aspects of e-waste enforcement, involving inspection and control, investigation and, in the case of a detected illegal shipment, intervention.

Chapter three explains general trade procedures and those related to the trade in UEEE and e-waste. Detailed information is given about documentation requirements and administrative and physical procedures that apply. "Do's and don'ts" are elaborated for the transboundary movements of UEEE and e-waste, based on the draft Basel Technical Guidelines on Transboundary Movements of Used Electronic and Electrical Equipment (UEEE) and E-waste, in particular regarding the distinction between waste and non-waste under the Basel Convention and EU Correspondents guidelines. These assist in determining which procedure applies, either for the import of goods or for the import of waste. A flowchart is used to visualize the different steps of the regular port procedures.

Chapter 3
Port procedures

Chapter four sets out the typical procedure for the inspection of a shipment of UEEE. Practical instructions are given for the organization of the inspection of a shipment, both administrative and physical considerations. The chapter offers a step-by-step guide to determine the character of the items inspected: UEEE or e-waste. The registration and communication of the findings and the necessary communication and collaboration at this stage is detailed. A decision tree is used to visualize how an inspection and investigation leads to the next applicable step.

Chapter 4
Inspection and investigation

Chapter five is a point of reference for the other chapters. It deals with the classification of items as used products or e-waste.

Chapter five outlines the current draft Basel Technical Guidelines on Transboundary Movements of UEEE and E-waste, in particular regarding the Distinction between Waste and Non-waste under the Basel Convention. Specific guidance is detailed on how to distinguish between UEEE and e-waste. Photographs have been added to the text to provide visual examples.

Chapter 5
UEEE or e-waste:
How to classify the inspected shipment?

Chapter six deals with the aftermath of a confirmed case of illegal traffic. What is needed to detain a shipment and how should it best be communicated to the holder? What would be the best intervention to apply? The procedure for the most typical intervention and the take back procedure for illegal shipments are explained. Also the importance of sound data recording is stressed once more, with regard to the possible prosecution of the responsible party(s), either in the country of export or in the country of import.

Chapter 6
Intervention

The Annexes are grouped around different themes. The first group of annexes supports the issue of classification of goods and wastes. The next group offers ready-to-use standard forms and examples of letters for case documentation and communication. The third group gives examples and best practices to illustrate various subject matters discussed in the manual. The fourth group contains additional background information on the e-waste issue. Finally, annexes offer materials for further exercise or research, either when using this manual or in the actual (enforcement) situation in your country.

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LIST OF ABBREVIATIONS

BCCC	Basel Convention Coordination Centre for Training and Technology Transfer;
BCRC	Basel Convention Regional Centre for Training and Technology Transfer;
BFR	Brominated Flame Retardant;
CA	Competent Authority;
CFC	Chlorofluorocarbon;
CMR	Convention Relative au Contrat de Transport International de Marchandises par Route / Convention on the Contract for the International Carriage of Goods by Road;
CRT	Cathode Ray Tube;
EC	European Community;
EEE	Electrical and Electronic Equipment;
ESM	Environmentally Sound Management;
EU	European Union;
EWC	European Waste Catalogue (2000/532/EC);
HS Code	Harmonized Commodity Description and Coding System (or short: Harmonized System);
ICT	Information and Communication Technology;
IMPEL	European Union Network for the Implementation and Enforcement of Environmental Law;
INECE	International Network for Environmental Compliance and Enforcement;
INTERPOL	International Criminal Police Organization;
LCD	Liquid Crystal Display;
LHA	Large Home Appliance;
MEA	Multilateral Environmental Agreement;
MPPI	Mobile Phone Partnership Initiative;
OECD	Organization for Economic Cooperation and Development;
PACE	Basel Convention Partnership for Action on Computer Equipment;
PCB	Polychlorinated biphenyl;
PCB	Printed Circuit Board. Essential element of electronic equipment (see also PWB);
POPs	Persistent Organic Pollutants;
PVC	Polyvinylchloride;
PWB	Printed Wiring Board (see also PCB);
SAD	Single Administrative Document;
SBC	Secretariat of the Basel Convention;
SME	Small and Medium Enterprises;
TBM	Transboundary Movement;
TFS	Transfrontier Shipment;
UEEE	Used Electrical and Electronic Equipment;
WCO	World Customs Organization;
WEEE or e-waste	Waste Electrical and Electronic Equipment;
WSR	Waste Shipment Regulation. Regulation (EC) 1013/2006 of the European Parliament and the Council on Shipments of Waste (as amended).

GLOSSARY OF TERMS[1]

Bamako Convention	Convention on the Ban of the Import into Africa and the Control of the Transboundary Movement and Management of Hazardous Wastes within Africa; adopted in 1991; entered into force in 1998;
Ban Amendment	In 1995, Parties adopted a decision IIII/1 as an amendment to the Convention (the "Ban Amendment"). The Ban Amendment provides for the prohibition by each Party listed in Annex VII (Parties and other States which are members of the OECD, EC, Liechtenstein) of all transboundary movements to States not listed in Annex VII of hazardous wastes covered by the Convention that are intended for final disposal, and of all transboundary movements to States not included in Annex VII of hazardous wastes covered by paragraph 1 (a) of Article 1 of the Convention that are destined for reuse, recycling or recovery operations. As of 1 March 2012, 73 Parties ratified the Ban Amendment. The Amendment, however, is not yet in force;
Basel Convention	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal; adopted in 1989; entered into force in 1992;
Bill of Lading or B/L	Shipping document serving as an invoice/confirmation of order between the owner of the goods and the carrier;
Competent authority	A governmental authority designated by a Party to be responsible, within such geographical areas as the Party may think fit, for receiving the notification of a transboundary movement of hazardous wastes or other wastes, and any information related to it, and for responding to such a notification;
Component	Element with electrical or electronic functionality connected together with other components, usually by soldering to a printed circuit board, to create an electronic circuit with a particular function (for example, an amplifier, radio receiver or oscillator);
Direct reuse	Continued use of electrical and electronic equipment and components by another person without the necessity of repair, refurbishment, or (hardware) upgrading, provided that such continued use is for the original intended purpose of the equipment and components;
Disposal	Any operations specified in Annex IV of the Basel Convention (Article 2, paragraph 4 of the Convention);
EDI message	Electronic Data Interchange message – a standard developed under the United Nations for communicating electronically. Used by customs to communicate with the shipper when a container is stopped or detained;
Electrical and Electronic Equipment	Equipment which is dependent on electric currents or electromagnetic fields in order to work properly;

[1] This list has been composed for the purpose of this manual and should not be considered as being legally binding. Nor have these terms been agreed internationally. The purpose of the glossary of terms is to assist readers to better understand certain terminology. Where applicable, the terms in this glossary correspond with the glossary of the Mobile Phone Partnership Initiative (MPPI) and the Partnership for Action on Computing Equipment (PACE). The PACE Guidance Document on the Environmentally Sound Management of Used and End-of-Life Computing Equipment (including the glossary), in particular its sections 1, 2, 4 and 5, was adopted at COP 10 of the Basel Convention in October 2011. Section 3, dealing with transboundary movements will be taken into account in the further development of the 'Technical Guidelines on Transboundary Movements of E-waste' (please see also chapter 5 of this Manual).

Environmentally Sound Management	Taking all practicable steps to ensure that wastes managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes;
Essential key function	The originally intended function(s) of a unit of equipment or component that will satisfactorily enable the equipment or component to be re-used;
E-waste or WEEE	Electrical and electronic equipment that is no longer suitable for use or that the last owner has discarded;
Final disposal	Relevant operations specified in Annex IV A of the Basel Convention;
Focal Point	The entity of a Party, referred to in Article 5 of the Basel Convention, which is responsible for receiving and submitting information as provided for in Articles 13 and 16 of the Convention;
Fully functional	Equipment is fully functional when it has been tested and demonstrated to be capable of performing the essential key functions it was designed to perform;
ICT equipment	Computing and related equipment, mobile phones;
Illegal traffic	Any transboundary movement of hazardous wastes or other wastes as defined in Article 9 of the Basel Convention;
Inspection	A process of examination which is in most cases carried out physically. The purpose is to gather proof and evidence of non-compliance in order to impose a fine or to file a court case;
Investigation	A process in which all the facts connected to a particular shipment are gathered and examined. It is mainly administrative work, which could include physical inspections;
Material recovery	Relevant operations specified in Annex IV B of the Basel Convention;
Minor defects	A fault of the used electrical or electronic equipment that does not prevent the item being used for its original purpose. For example, where the timer on a washing machine no longer works but the main wash programmes can still be operated;
Notification procedure	Procedure of prior informed consent (see below) requiring the notifier to obtain consent from the relevant Competent Authorities prior to export by completing notification and movement documents as outlined in Basel Convention;
Notifier	Person or legal entity who causes or arranges for the export; the person responsible for a transboundary movement;
PIC procedure	Procedure based on prior informed consent also known as the notification procedure see above;

Recovery	Relevant operations specified in Annex IV B of the Basel Convention; recycling operations are part of this Annex;
Refurbishment	Process for creating refurbished or reconditioned equipment including such activities as cleaning, data sanitization, and (software) upgrading;
Repair	Process of fixing specified faults in equipment to enable the equipment to be used for its original intended purpose;
Re-use	Process of using again used equipment or a functional component from used equipment in the same or a similar function, possibly after refurbishment, repair or upgrading;
Reverse supply chain	In the case of used electrical and electronic equipment it is the chain of activities producing secondary raw material from the point of obsolescence of electrical and electronic equipment up to the point where it is used again to produce new products or semi-finished products;
Risk Profiling	Using various methods (such as the use of intelligence and analysis of statistical data) to identify the likelihood of a container containing waste and/or a company illegally exporting waste;
Rotterdam Convention	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade; adopted in 1998; entered into force in 2004;
Stockholm Convention	Stockholm Convention on Persistent Organic Pollutants; adopted in 2001; entered into force in 2004;
Used Electrical and Electronic Equipment	Electrical and electronic equipment which its owner does not intend to use any longer, which is fully functional and which is not classified as WEEE or e-waste;
Value-added chain	See reverse supply chain;
Waigani Convention	Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region; adopted in 1995 and entered into force in 2001[2];
Waste(s)	Substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law (Article 2, paragraph 1 of the Basel Convention);
Waste generator	Anyone whose activities produce waste;
WEEE-Directive	Directive 2008/34/EC of the European Parliament and of the Council of 11 March 2008 amending Directive 2002/96/EC on waste electrical and electronic equipment (WEEE).

[2] *The Secretariat of the Pacific Regional Environment Programme (SPREP) serves as the Secretariat for the Waigani Convention. See also: http://www.sprep.org/attachments/Publications/FactSheet/waiganiconv.pdf*

1 An introduction to the e-waste issue

1.0 Introduction

Information Communication Technology (ICT) has revolutionized modern living and changed the way we live and work. This has been driven by unprecedented high volumes of production and usage of electronic products for individual or family use, in particular personal computers, mobile phones, and television sets. The difference in access to ICT between developed and developing countries is commonly referred to as the "digital divide". Africa has been undergoing rapid ICT transformation in recent years, attempting to bridge this divide by importing second-hand or used computers, mobile phones, and television sets from developed countries. The countries of the region, however, lack the infrastructure and resources for the environmentally sound management (ESM) of electrical and electronic waste (e-waste) when such imports reach their end-of-life[3].

E-waste or end-of-life electric and electronic equipment generated locally or imported from other countries end up being piled or burned in unregulated dumpsites. Entire communities are exposed to this type of waste which, if not disposed of in a sound manner, release dangerous substances in the environment and affect the health of local communities living in its vicinity. E-waste contains toxic substances such as lead, cadmium, mercury or brominated flame retardants. On the other hand, e-waste is also a resource and some of these substances, as well as valuable parts, could be re-used and recycled providing economic opportunities through the development of collection, recovery and recycling businesses, initiated either with involvement of the actual informal sector or by larger local or foreign companies who have access to capital and technology to start these operations on a larger scale.

A strict monitoring of flows of e-waste imports and exports as well as the environmentally sound management of the discarded equipment is necessary to protect human health and the environment, while giving consideration to the socio-economic impacts of the e-waste management.

1.1 The e-waste issue

1.1.1 Geographical spread of e-waste

In the past 10 years, sales of electrical and electronic equipment (EEE) have been steadily increasing on all continents while used televisions, computers, refrigerators and many other sorts of used electrical and electronic equipment (UEEE) containing hazardous substances have been exported from countries that are members to the Organization for Economic Cooperation and Development (OECD), such as the European Union and the USA, to non-OECD member countries, predominantly in Africa and Asia. One of the factors contributing to the trade of UEEE is driven by the desire of citizens in the countries of import to have access to good quality second-hand equipment at an affordable price.

However, a certain percentage of the goods do not arrive at their destination in good condition. This is either as a result of shipping conditions or because the items were not functional at the point of departure. In many instances, it is Waste Electrical and Electronic Equipment (WEEE) or e-waste and not UEEE which is moved across the borders.

[3] *Introductory paragraph derived from the publication of the Secretariat of the Basel Convention - Geneva, Switzerland, December 2011, Where are WEee in Africa. Findings from the Basel Convention E-waste Africa Programme.*

Map 1: *Typical flows of e-waste (and UEEE) between OECD and non-OECD countries (published by the BBC in 2010, based on data provided by Greenpeace and Basel Action Network, this map may not reflect the full picture as other countries may also be involved in the e-waste (and UEEE-) trade).*

The volume of the trade in UEEE is not easily expressed in figures, as there is insufficient data. This is mainly due to the fact that the equipment can be declared under a wide variety of codes and labels. The labels range from 'used goods' and 'household goods' to 'goods for charity' and 'mixed equipment'. Also commonly agreed customs codes are not assigned for UEEE or e-waste.

Rough estimates of the total global volume are based on the amount of e-waste / UEEE generated per country and the percentage of this e-waste / UEEE being collected and recycled. In the EU, 7.2 million tons of e-waste have been generated in 2005, of which less than 40% was collected and recycled, leaving 4.3 million tons unaccounted for[4]. The same study gives a prediction for the year 2011 with 8.3 million tons generated, 60% collected and recycled, still leaving 3.4 million tons unaccounted for.

In recent years, country assessments have been carried out in a limited number of countries of import, focusing on import and use of e-waste and UEEE as well as on the generation of e-waste within the countries where the assessments were carried out[5].

The graph and the table below show:

- Estimated volumes of e-waste imported into selected West African countries and
- Estimated volumes of e-waste imported, of EEE in use and of e-waste generated into and within selected West African countries.

[4] United Nations University – Bonn, Germany; Final Report: 2008 Review of Directive 2002/96 on Waste Electrical and Electronic Equipment (WEEE); tables 40 and 56 combined, for the prediction: tables 41 and 57 combined. See: http://ec.europa.eu/environment/waste/weee/pdf/final_rep_unu.pdf

[5] Secretariat of the Basel Convention - Geneva, Switzerland, December 2011, Where are WEee in Africa. Findings from the Basel Convention E-waste Africa Programme.

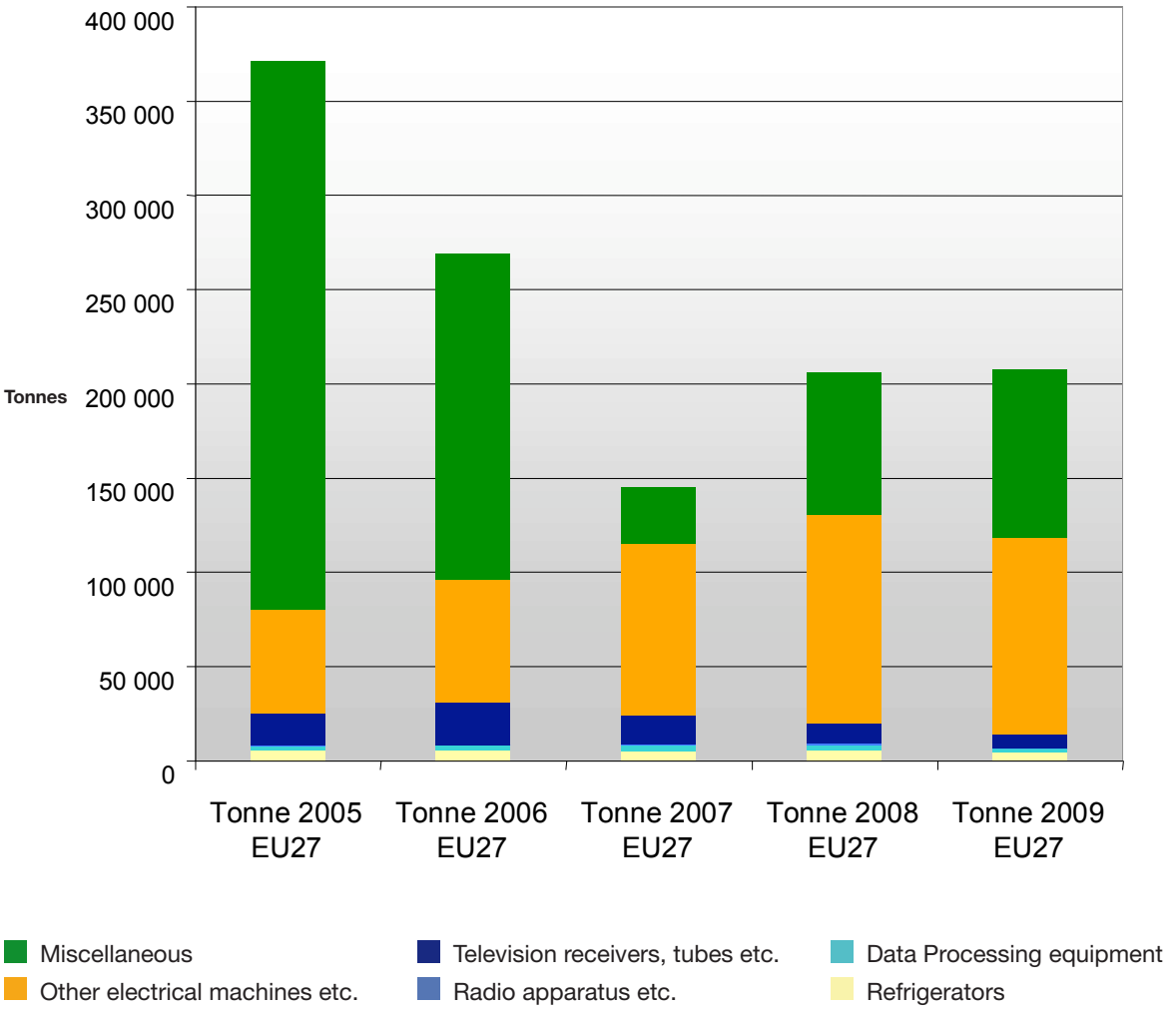


Table 1: *Export of electrical, electronic and miscellaneous goods from 27 EU member states to selected West African countries 2005 – 2009. (source data: EUROSTAT. Source figure: SBC - Geneva, Switzerland, December 2011, Where are WEee in Africa. Findings from the Basel Convention E-waste Africa Programme).*

Country	Year	Imports of EEE		EEE in use		E-waste generated	
		tonnes / year	thereof used EEE	tonnes / year	kg / inhabit-ant	tonnes / year	thereof collected
Benin	2009	16,000	30%	55,000	6.32	9,700	N/A
Côte d'Ivoire	2009	25,000	48%	100,000	4.8	15,000	N/A
Ghana	2009	215,000	70%	984,000	41.0	179,000	172,000
Liberia	2009	3,500	10%	17,000	4.6	N/A	N/A
Nigeria	2010	1,200,000	35-70%	6,800,000	44.0	1,100,000	N/A

Table 2: *Quantitative data for selected West African countries related to imports, installed base and e-waste generated (source: SBC - Geneva, Switzerland, December 2011, Where are WEee in Africa. Findings from the Basel Convention E-waste Africa Programme).*

1.1.2 Beneficial and harmful aspects of UEEE and e-waste

Disregarding the question of whether the items should be classified as UEEE or e-waste, they enter into a chain of operations which can best be described as recovery or recycling operations. From the moment of arrival to the African continent the used items are being sorted, repaired, refurbished and eventually used again. If repair is not possible, the "Back to Cradle Supply Chain" starts (see the textbox below). The items are dismantled, partly for the use of spare parts and partly for material recovery; the remaining parts are burned or land filled.

Back to Cradle Supply Chain

The term of supply chain is used to describe people, organizations, technology, activities, information and resources involving a product or service from supplier to customer. Let us take the example of coal:

1. Coal is taken out of a mine, converted to coke and sold to a steelwork.
2. The steelwork burns the coke to get the iron out of ore. This is converted to steel and then to steel plates.
3. An automotive supplier transforms these steel plates to body parts, which are sold to a car manufacturer.
4. The car manufacturer produces cars which are sold to retailers.
5. The retailers sell the cars to customers.

Similar supply chains do exist for all kind of products, also for EEE. Sometimes related terms like value-adding chain or value chain are also used. The value chain has been developed to optimise the economics of a product until it reaches the end-user.

Unlike the usefulness of a product, previously the disposal of goods was not on the minds of the business community. Nowadays the thinking goes further, e.g. in the direction of the so-called **Reverse Supply Chain**. By setting up the reverse supply chains, companies can not only organize the return process in a quick, efficient, and cost-effective manner, but they also improve their customer satisfaction.

In parallel to these developments, life-cycle thinking evolved. It takes into consideration all the environmental impacts throughout the life of a product, including disposal. In the last three decades, the volume and quantity of abandoned materials have significantly grown thus posing a danger to our health and environment. This last phase of the EEE life-cycle – disposal – has particular interest. Initially it was mainly for environmental reasons. Other risks from the unsound management of wastes, including hazardous wastes and the impact on public health were also recognized as a concern. At the beginning of this century the need to look even further became more and more apparent, not only because of the huge mountains of waste but also for the scarcity of certain raw materials, particularly used in electrical and electronic equipment, e.g. precious and rare earth metals, which are increasingly needed for high-tech EEE and renewable energy technologies.

What happens to the equipment after its second or third use? What we call a **"Back to Cradle Supply Chain"** could begin after its last use. Generally it is seen as the recycling (or disposal) phase.

In many cases, and especially with e-waste, this has global dimensions, involving labour, logistics, trade and more. It seems impossible for any country or single authority to get a full grip on this chain and individual actors often do not know much about the whole chain and the other actors involved in the various phases. Nevertheless, anyone wanting to interfere in this chain has to consider its characteristics and the interests of those involved.

Textbox 1: *Back to Cradle Supply Chain*

In developing countries, the process of recovery and recycling often takes place in conditions that are harmful to the people involved and to the environment. This leads to direct human health impacts in the short as well as the long term and to the pollution of soil, air, ground and surface waters and the food chain.

The table below shows the effects on human health and the environment of hazardous substances in the most common components of EEE. Most of these substances are so-called 'persistent, bio-accumulative toxins' (PBTs).

Substance	Occurrence in e-waste
Halogenated compounds:	
- PCB (polychlorinated biphenyls)	Condensers, Transformers
- TBBA (tetrabromo-bisphenol-A) - PBB (polybrominated biphenyls) - PBDE (polybrominated diphenyl ethers)	Fire retardants for plastics (thermoplastic components, cable insulation) TBBA is presently the most widely used flame retardant in printed wiring boards and casings.
- Chlorofluorocarbon (CFC)	Cooling unit, Insulation foam
- PVC (polyvinyl chloride)	Cable insulation
Heavy metals and other metals:	
- Arsenic	Small quantities in the form of gallium arsenide within light emitting diodes
- Barium	Getters in CRT
- Beryllium	Power supply boxes which contain silicon controlled rectifiers and x-ray lenses
- Cadmium	Rechargeable NiCd-batteries, fluorescent layer (CRT screens), printer inks and toners, photocopying-machines (printer drums)
- Chromium VI	Data tapes, floppy-disks
- Lead	CRT screens, batteries, printed wiring boards
- Lithium	Li-batteries
- Mercury	Fluorescent lamps that provide backlighting in LCDs, in some alkaline batteries and mercury wetted switches
- Nickel	Rechargeable NiCd-batteries or NiMH-batteries, electron gun in CRT
- Rare Earth elements (Yttrium, Europium)	Fluorescent layer (CRT-screen)
- Selenium	Older photocopying-machines (photo drums)
- Zinc sulphide	Interior of CRT screens, mixed with rare earth metals
Others:	
- Toner Dust	Toner cartridges for laser printers / copiers
Radio-active substances	
Americium	Medical equipment, fire detectors, active sensing element in smoke detectors

Table 3: *Hazardous substances in e-waste*
(source: Knowledge base ewasteguide.info; http://ewasteguide.info/node/219).

Hazardous substance	Health and environment risk
Arsenic	Arsenic is a poisonous metallic element which is present in dust and soluble substances. Chronic exposure to arsenic can lead to various diseases of the skin and decrease nerve conduction velocity. Chronic exposure to arsenic can also cause lung cancer and can often be fatal.
Barium	Barium is a metallic element that is used in sparkplugs, fluorescent lamps and “getters” in vacuum tubes. Being highly unstable in the pure form, it forms poisonous oxides when in contact with air. Short-term exposure to barium could lead to brain swelling, muscle weakness, damage to the heart, liver and spleen. The long-term effects of chronic barium exposure to human beings are still not known due to lack of data on the effects.
Berryllium	Beryllium has recently been classified as a human carcinogen because exposure to it can cause lung cancer. The primary health concern is inhalation of beryllium dust, fume or mist. Workers who are constantly exposed to beryllium, even in small amounts, and who become sensitised to it can develop what is known as Chronic Beryllium Disease (beryllicosis), a disease which primarily affects the lungs. Exposure to beryllium also causes a form of skin disease that is characterised by poor wound healing and wart-like bumps. Studies have shown that people can still develop beryllium diseases even many years following the last exposure.
Brominated flame retardants (BFRs)	The 3 main types of BFRs used in electronic and electrical appliances are Polybrominated biphenyl (PBB), Polybrominated diphenyl ether (PBDE) and Tetrabromobisphenol - A (TBBPA). Combustion of halogenated case material and printed wiring boards at lower temperatures releases toxic emissions including dioxins which can lead to severe hormonal disorders.
Cadmium	Cadmium components may have serious impacts on the kidneys. Cadmium is adsorbed through respiration but is also taken up with food. Due to the long half-life in the body, cadmium can easily be accumulated in amounts that cause symptoms of poisoning. Cadmium shows a danger of cumulative effects in the environment due to its acute and chronic toxicity. Acute exposure to cadmium fumes causes flu-like symptoms of weakness, fever, headache, chills, sweating and muscular pain. The primary health risks of long term exposure are lung cancer and kidney damage. Cadmium also is believed to cause pulmonary emphysema and bone disease (osteomalacia and osteoporosis).
CFCs (Chlorofluorocarbons)	Chlorofluorocarbons are compounds composed of carbon, fluorine, chlorine, and sometimes hydrogen. They accumulate in the stratosphere and have a deleterious effect on the ozone layer. This results in increased incidence of skin cancer in humans and in genetic damage in many organisms.
Chromium	While some forms of chromium are non toxic, Chromium (VI) is easily absorbed in the human body and can produce various toxic effects within cells. Most chromium (VI) compounds are irritating to eyes, skin and mucous membranes. Chronic exposure to chromium (VI) compounds can cause permanent eye injury, unless properly treated. Chromium VI may also cause DNA damage.
Dioxins	Dioxins are known to be highly toxic to animals and humans because they bio-accumulate in the body and can lead to malformations of the foetus, decreased reproduction and growth rates and cause impairment of the immune system among other things. The best-known and most toxic dioxin is 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD).

Lead	Short-term exposure to high levels of lead can cause vomiting, diarrhea, convulsions, coma or even death. Other symptoms are appetite loss, abdominal pain, constipation, fatigue, sleeplessness, irritability and headache. Continued excessive exposure, as in an industrial setting, can affect the kidneys. It is particularly dangerous for young children because it can damage nervous connections and cause blood and brain disorders.
Mercury	Mercury is a toxic heavy metal that bioaccumulates causing brain and liver damage if ingested or inhaled. In electronics and electrical appliances, mercury is highly concentrated in batteries, some switches and thermostats, and fluorescent lamps.
Polychlorinated biphenyls (PCBs)	PCBs have been shown to cause cancer in animals. PCBs have also been shown to cause a number of serious non-cancer health effects in animals, including effects on the immune system, reproductive system, nervous system, endocrine system and other health effects. PCBs are persistent contaminants in the environment. Due to the high lipid solubility and slow metabolism rate of these chemicals, PCBs accumulate in the fat-rich tissues of almost all organisms (bioaccumulation).
Polyvinyl chloride (PVC)	PVC is hazardous because contains up to 56 percent chlorine which when burned produces large quantities of hydrogen chloride gas, which combines with water to form hydrochloric acid and is dangerous because when inhaled, leads to respiratory problems.
Selenium	Exposure to high concentrations of selenium compounds cause selenosis. The major signs of selenosis are hair loss, nail brittleness, and neurological abnormalities (such as numbness and other odd sensations in the extremities).

Table 4: *Hazardous substances in e-waste*
(source: Knowledge base ewasteguide.info; http://ewasteguide.info/node/219).

Despite all the negative environmental and health impacts, there are a number of socio-economic drivers connected to the influx of both UEEE and e-waste. To all those involved in the trade, ranging from an exporter, shipping company, clearing agency, importer, refurbisher, reseller, scrap collector down to the end-user, e-waste management operations bring in the short term a paid job, profit, and subsequently socio-economic benefits. This is a fact that creates a high pressure on authorities (e.g. ministries of trade, environment, social development and finance and/or taxes) in the countries of import, responsible for adopting measures aimed at limiting the negative impacts on human health and the environment, such as trade restrictions.

1.2 Legislation

1.2.1 Movements of waste

Global legislation

In order to regulate the movement of hazardous waste, especially that cross-national borders, a multilateral environmental agreement (MEA) has been reached through the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. The Basel Convention dates from 1989 and came into force in 1992. As of March 2012, the Basel Convention has 179 Parties.

No transboundary movements of hazardous wastes are permitted between a Party and a non-Party to the Basel Convention, unless a bilateral agreement or arrangement is in place.

The Basel Convention is based on three pillars:

1 ***The minimization of the generation of hazardous and other wastes;***

2 ***The requirement of ESM of hazardous wastes and other wastes.*** The aim of ESM is to protect human health and the environment by minimizing hazardous waste production whenever possible. ESM means addressing the issue through an "integrated life-cycle approach", which involves strong controls from the generation of hazardous waste to its storage, transport, treatment, reuse, recycling, recovery or final disposal. ESM is further discussed under a separate heading in this subchapter;

3 ***The control of transboundary movements of hazardous wastes and other wastes.*** The Basel Convention regulates transboundary movements of hazardous and other wastes by applying the concept of Prior Informed Consent (PIC). This means that imports, transits and exports of wastes that fall under the Basel Convention are only allowed when all involved Parties have been notified and given their consent before the movements are initiated. It is also possible, for any country that is a Party to the Basel Convention, to decide to prohibit the export or import of specified types of hazardous waste, such as e-waste.

Parties to the Basel Convention are under an obligation to take the appropriate measures to ensure that the transboundary movement (TBM) of hazardous wastes and other wastes are only allowed if one of the three following conditions is met:

- the State of export does not have the technical capacity and the necessary facilities, capacity or suitable disposal sites in order to dispose of the wastes in question in an "environmentally sound manner"; or
- the wastes in question are required as raw material for recycling or recovery industries in the State of import; or
- the TBM in question is in accordance with other criteria decided by the Parties (such criteria will normally be found in the decisions adopted by the Conference of the Parties).

In all cases, the Convention requires that the standard of ESM of hazardous wastes or other wastes is met. In addition to these conditions, the Basel Convention specifies instances in which Parties *may restrict* TBM and instances in which Parties *must restrict* TBM. Such restrictions may apply to the export or to the import of hazardous wastes and other wastes. Several Parties to the Convention have thus, for instance, included in their national legislation import and transit restrictions or prohibitions which must be respected by exporting Parties. A list of such import and export restrictions and prohibitions may be found on the website of the Convention at: http://www.basel.int/Countries/NationalDefinitions/tabid/1480/Default.aspx

From the countries that participated in the E-waste Africa programme, only Tunisia has transmitted such a notification to the Secretariat. It contains a listing of four- and six digit waste codes and a definition of hazardous waste.

In addition, the Basel Convention requires that only persons authorized or allowed to transport or dispose of wastes undertake such operations, and that wastes subject to a TBM be packaged, labelled and transported in conformity with generally accepted and recognized international rules and standards.

The Basel Convention contains a detailed PIC procedure with strict requirements for TBM of hazardous wastes and other wastes. The procedures form the heart of the Basel Convention control system and are based on four key stages:

1 Notification;
2 Consent and issuance of movement document;
3 Transboundary movement;
4 Confirmation of ESM disposal.

For information on the Basel Convention control procedure, see the leaflet "Controlling transboundary movements of hazardous wastes" available at: http://www.basel.int/Portals/4/Basel%20Convention/docs/pub/leaflets/leaflet-control-procedures-en.pdf

Ban Amendment to the Basel Convention

At the second meeting of the Conference of the Parties to the Basel Convention (COP) in 1994, Parties adopted a decision whereby they agreed to prohibit immediately all transboundary movements of hazardous wastes which are destined for final disposal operations from OECD to non-OECD States. In that same decision, Parties also agreed to phase out by 31 December 1997, and prohibit as of that date, all transboundary movements of hazardous wastes destined for recovery or recycling operations from OECD to non-OECD States. At the next meeting (COP-3) in 1995, Parties adopted a further decision as an amendment to the Basel Convention (the "Ban Amendment").

Scope of the Ban

The "Ban Amendment" provides for the prohibition by each Party listed in the Annex VII of the Basel Convention (Parties and other States which are members of the OECD, EC, Liechtenstein) of all transboundary movements to States not listed in Annex VII of hazardous wastes covered by the Convention that are intended for final disposal. Also all transboundary movements to States not included in Annex VII of hazardous wastes covered by paragraph 1 (a) of Article 1 of the Convention that are destined for reuse, recycling or recovery operations are prohibited.

As of March 2012, the Ban Amendment was not yet in force. Some Parties however have already implemented the Ban Amendment in their national or regional legislation, such as the European Union member states. Other States have adopted regional agreements banning the import of hazardous and other wastes, for instance the 1998 Bamako Convention and the 1995 Waigani Convention (please see below for more information about both Conventions).

Textbox 2: *The Ban Amendment*

Regional Agreements and Regulations

The Bamako Convention on the Ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa is a treaty of African nations prohibiting the import of any hazardous (including radioactive) waste. The Convention was negotiated by twelve nations of the Organization of African Unity at Bamako, Mali in January, 1991 and came into force in 1998.

The Bamako Convention uses a format and language similar to that of the Basel Convention, but it is broader in prohibiting all imports of hazardous waste from non-African countries. Additionally, unlike the Basel Convention, it does not exclude certain hazardous wastes (like those for radioactive materials).

The Waigani Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region opened for signature in 1995 and entered into force in 2001.

The Convention is designed to:

1 Reduce or eliminate transboundary movements of hazardous and radioactive wastes into and within the Pacific Forum region;
2 Minimize the production of hazardous and toxic wastes in the Pacific Forum region;
3 Ensure that disposal of wastes is carried out in an environmentally sound manner and as close to the source as possible; and
4 Assist Pacific island countries that are Parties to the Convention in the environmentally sound management of hazardous and other wastes they generate.

The Convention covers toxic, poisonous, explosive, corrosive, flammable, eco-toxic, infectious and radioactive wastes. The Convention requires that Parties:

- ban the import of hazardous and radioactive wastes;
- minimize the production of hazardous wastes; and
- cooperate to ensure that wastes are treated and disposed of in an environmentally sound manner.

The European Union has adopted the *Waste Shipment Regulation (EC) Nº 1013/2006* to implement the provisions of the Basel Convention. This regulation labels the export of waste with hazardous characteristics from the European Union to any non OECD-member country both for recovery as well as disposal as illegal. Exports of non-hazardous waste, also called green-listed waste, to non OECD-member countries for recovery are regulated by *European Regulation Nº 1418/2007*. The European Commission periodically sends out a questionnaire to all the non OECD-member countries asking them if, and if so, under which conditions they allow the import of non-hazardous waste into their country for recovery. They can either: a) prohibit the import, b) require the procedure of prior written notification and consent as described in Article 35 of Regulation (EC) No 1013/2006, c) inform that there will be no control in the country of destination, or d) inform that other control procedures will be followed in the country of destination under applicable national law.

The answers provided by the non OECD-member countries are implemented in the Regulation Nº1418/2007. The European Commission periodically updates this Regulation by transposing replies submitted by importing countries. This means that even if a waste is considered non-hazardous, still the PIC procedure needs to be followed if that is what the importing non OECD-member country has requested.

The textbox below gives examples of the import policy of four non-OECD countries, as communicated to the EU by the time of the publication of this manual.

Benin has prohibited the import of all non-hazardous wastes originating from the European Union.

Egypt has prohibited the import of electrical assemblies consisting only of metals or alloys, electronic scrap (e.g. printed circuit boards, electronic components, wire, etc.) and reclaimed electronic components suitable for base and precious metal recover. Vessels and other floating structures for breaking up, properly emptied of any cargo and other materials arising from the operation of the vessel which may have been classified as a dangerous substance or waste.

Ghana and Nigeria did not respond to the questionnaire from the European Union. For the export of non-hazardous e-waste to these countries a notification procedure is required.

Note: in Nigeria the National Environmental Standards and Regulations Enforcement Agency (NESREA) adopted regulations, which may be cited as the National Environmental (Electrical/Electronics Sector) Regulations S.I. No. 23 of 2011. The principal objective of these regulations is to prevent and minimize pollution from all operations and ancillary activities of the EEE sector to the Nigerian environment. The regulations are based on a life-cycle approach and are intended to cover all aspects of the EEE sector from cradle to grave, thus also including e-waste. NESREA also developed a guide for importers of used EEE into Nigeria, which contains the guiding principles, requirements for import of used EEE, and the description of items that are not allowed to be imported to Nigeria. According to this guide, all importers of used EEE in Nigeria are required to register with NESREA.

Textbox 3: *Import policies for e-waste*[6]

In addition, the European Union adopted the *Waste Electrical and Electronic Equipment Directive (WEEE Directive 2002/96/EC* (as amended by Directives 2003/108/EC and 2008/34/EC). The directive imposes the responsibility for the disposal of waste electrical and electronic equipment on the manufacturers of such equipment. Those companies should establish an infrastructure for collecting WEEE, in such a way that "users of electrical and electronic equipment from private households should have the opportunity to return WEEE free of charge". In addition, companies are compelled to treat collected waste in an ecologically friendly manner either by ecological disposal or by re-use/refurbishment. It also sets collection, recycling and recovery targets for all types of electrical goods.

Despite such rules on collection and recycling only one third of electrical and electronic waste in the European Union is reported as separately collected and appropriately treated. A part of the other two thirds is potentially still going to landfills and to sub-standard treatment sites in or outside the European Union. The collection target of 4 kg per person per year does not properly reflect the amount of WEEE arising in individual Member States. Illegal trade of electrical and electronic waste to non-EU countries continues to be identified at EU borders.

As inadequately treated e-waste poses environmental and health risks, in December 2008 the European Commission proposed to revise the Directive on Waste Electrical and Electronic Equipment in order to tackle the fast increasing waste stream of such products. Specific objectives of the WEEE recast proposal are to increase resource efficiency and ensure proper treatment of e-waste by setting new collection targets adapted to the reality of each Member State. Further objectives are to reduce unnecessary administrative burdens and to ensure better implementation, especially by reversing the burden of proof on exports of used equipment suspected to be WEEE. As of June 2012, the new WEEE Directive was not yet applicable.

[6] *The information regarding Benin and Egypt is laid down in Commission Regulation (EC) 1418/2007. All non-OECD member states have received the European Commissions' questionnaire on waste shipment. The answers to that questionnaire (as received to date) are reflected in the table above. For both questionnaire and countries' replies please see: http://ec.europa.eu/trade/wider-agenda/environment/shipment-of-non-hazardous-waste/questionnaire/*

1.2.2 Waste characterization and classification

"Waste is an inevitable by-product of human activities since the creation of life on earth. Waste is also a complex issue and there are many definitions of wastes"

This quote[7] can be read as a philosophical statement but at the same time it indicates the challenges that policy-makers, law-makers and law-enforcement entities encounter when addressing the e-waste issue.

To be able to get a grip on this issue, enforcers depend on legislation that is actually in force in their countries. As part of such legislation, clear definitions of 'waste' and 'e-waste' are needed. Only when such definitions are introduced, one can distinguish UEEE from e-waste.

Basel Convention
[Article 2(1)]
'Wastes' are substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law.

Basel Convention
[Article 1(1)]
The following wastes that are subject to transboundary movement shall be "hazardous wastes" for the purposes of this Convention:
(a) Wastes that belong to any category contained in Annex I, unless they do not possess any of the characteristics contained in Annex III; and
(b) Wastes that are not covered under paragraph (a) but are defined as, or are considered to be, hazardous wastes by the domestic legislation of the Party of export, import or transit.

EU Waste Framework Directive (EC/2008/98)
[Article 3(1)]
'Waste' means any substance or object which the holder discards or intends or is required to discard.
[Article 3(2)]
'Hazardous Waste' means waste which displays one or more of the hazardous properties listed in Annex III.

EU WEEE Directive (EC/2002/96)
'Waste electrical and electronic equipment' or 'WEEE' means electrical or electronic equipment which is waste within the meaning of Article 1(a) of Directive 75/442/EEC, including all components, subassemblies and consumables which are part of the product at the time of discarding.

PACE Guidance Document, 2011
E-waste is 'electrical and electronic equipment that is no longer suitable for use or that the last owner has discarded'.

Textbox 4: *Examples of (e-) waste definitions*

[7] Prof. O. Osibanjo; Overview of information on illegal waste shipments in Africa and the workshop "clamping down on illegal waste shipments to Africa", 24-26 November 2009, Accra, Ghana.

Even with these (e-)waste definitions at hand, it is usually difficult to determine whether a particular shipment of EEE may be classified as UEEE or e-waste. Waste or not, that is the question. Paragraphs 5.1 and 5.2 of this manual deal with this question. Once the decision has been made to classify the items as e-waste, the next important question is: does it concern hazardous or non-hazardous waste? This matter is elaborated in paragraph 5.3.

For the exact classification of e-waste, different waste classification systems exist. The Basel Convention uses a system with Y, A and B codes, for hazardous and non-hazardous wastes as well as hazardous characteristics. Other waste classification systems used worldwide are the OECD Waste Lists and the European Waste Catalogue (EWC). Please see Annex A1 for applicable waste codes for e-waste.

Waste classification codes do not always have a corresponding entry in the World Customs Organization Harmonized System (HS) goods nomenclature, which serves as the global system for customs authorities. In Annex A2, different types of e-waste are described and classified, both under waste legislation and the HS.

Harmonized System

The Harmonized System is a multi-purpose international product nomenclature system developed and maintained by the World Customs Organization (WCO). The system is used as the basis for customs tariffs and for the collection of international trade statistics. It is also used by governments, international organizations and the private sector for many other purposes such as internal taxes, trade policies, monitoring of controlled goods, freight tariffs, transport statistics, quota controls, etc. The HS is thus a universal economic language and code for goods and an indispensable tool for international trade.

Textbox 5: *The Harmonized System of the World Customs Organization*

1.2.3 Environmentally Sound Management of e-waste

Environmentally sound re-use, refurbishing, recycling and material recovery are generally considered to be preferred options for managing used and end-of-life computing equipment respectively because they help to extend the useful life of products and/or help to conserve natural resources.

Definition of Environmentally Sound Management ((ESM), Basel Convention, Article 2):

Environmentally sound management of hazardous wastes or other wastes means taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes.

Textbox 6: *Environmentally Sound Management*

Effective environmentally sound management of e-waste on the national level requires effective legal systems and infrastructure to protect workers, communities, and the environment. The Basel Guidance Document on the Preparation of Technical Guidelines for the Environmentally Sound Management of Wastes Subject to the Basel Convention as well as the Partnership for Action on Computing Equipment (PACE)[8] under the Basel Convention, have identified a number of recommendations for ESM of e-waste. These can be found in Annex C1 to this manual.

National or regional legislation may incorporate such standards. They can also be introduced as voluntary measures for the private sector. However, large differences in environmental standards may exist between countries. This could encourage unscrupulous operators to direct unsound recycling practices to countries with less strict legislation in force.

[8] For more information see "Environmentally Sound Management (ESM) Criteria Recommendations" prepared by the PACE Ad Interim Project Group on ESM Criteria, approved by the PACE Working Group in March 2009 and revised in March 2011. The summary of its recommendations are included in the overall Guidance Document on the Environmentally Sound Management of Used and End-of-Life Computing Equipment approved by the tenth Conference of the Parties to the Basel Convention. Please see also footnote 1.

1.2.4 Related conventions and legislation

The **Stockholm Convention on Persistent Organic Pollutants** is a global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have adverse effects to human health or to the environment.

Persistent organic pollutants (POPs) share four properties:

1 They are highly toxic and can cause serious health problems such as cancer and birth defects in humans;
2 They are persistent, lasting for many years before degrading into less dangerous forms;
3 They evaporate and travel long distances through the air and through water; and
4 They accumulate in fatty tissues.

The combination of these properties makes POPs highly dangerous. The Stockholm Convention aims to protect human health and the environment from the negative effects of POPs by restricting and ultimately eliminating their production, use, trade, release and storage. The list of chemicals currently controlled under the Stockholm Convention contains 22 POPs.

There are a number of POPs, in particular certain types of brominated flame-retardants, perfluorooctane sulfonate (PFOS) which are of concern in relation to EEE. These substances are contained in, for example, plastics, circuit boards, photo resistant and anti-reflective coatings. In addition there is another category of POPs which is also a subject for concern in relation to e-waste, in particular furans and dioxins which are unintentionally produced POPs during processes such as the open burning of electronic waste. The Stockholm Convention regulates production, use, and import and export and end-of-life management of POPs. The Convention does not allow for recovery, recycling, reclamation, direct reuse or alternative uses of POPs, with the exception of the recycling of articles containing listed brominated flame-retardants. Wastes containing POPs are only allowed to be imported or exported for environmentally sound management and only if the Basel Convention provisions have been followed (i.e. the PIC procedure).

The **Rotterdam Convention on the Prior Informed Consent procedure for Certain Hazardous Chemicals and Pesticides in International Trade** creates legally binding obligations for the implementation of the Prior Informed Consent (PIC) procedure, for the transboundary movements of pesticides and hazardous chemicals. Chemicals listed in the Rotterdam Convention are subject to extensive information exchange, priority attention for national decisions on imports and obligations related to export controls. The Convention provides its Parties the opportunity to inform exporting countries as to whether import of certain hazardous chemicals to its territory is allowed, restricted or forbidden and for which use category. Importing countries are requested to indicate whether or not they consent to the import of the listed chemical and, if so, under what conditions.

The **Montreal Protocol on Ozone Depleting Substances** is an international treaty to protect the ozone layer by phasing out the production and use of ozone depleting substances (ODS) such as CFC (chlorofluorocarbon) and HCFC (hydrochlorofluorocarbon), which are used as refrigerants.

Fridges and freezers that contain CFCs or HFCs are not allowed to be exported out of the EU.

1.3 Enforcement structures

In order to develop an effective inspection and enforcement strategy in the port or at any other significant border crossing, one has to be aware of possibilities and limitations to perform inspections. In this manual, the choice has been made to focus on ports as the vast majority of imports into Africa find their way through ports.

To make an accurate assessment of the situation, the following questions should be answered:

- Basic port facts (geographical location, size, main routes and shipping lines as well as the description of the port procedures and customs clearance procedures).
- The legal framework that is in place: are there laws in effect that can be enforced, does the regulatory framework provide for legal powers to inspect, investigate and enforce? Are there legal obligations to collaborate with other authorities in the port? Are there import restrictions in place for certain goods/waste streams?
- Collaboration: which authorities play a role in the port and the e-waste enforcement? How do they or should they collaborate?
- Do the enforcement agencies have sufficient legal powers, competences and equipment to perform inspection, carry out investigations and enforce the implementation of the national and international legislation in relation to hazardous and non-hazardous waste?

Once these basic questions are answered, an inspection and enforcement strategy could be developed, based on the options and gaps resulted from the assessment. The strategy should cover the whole cycle of ‘planning’ (priorities and risk assessment), ‘executive framework’ (protocols and instructions), ‘execution and reporting’ and ‘evaluation’.

Annex D2 contains an example of a questionnaire for the enforcement structure.

2 Communication and collaboration

2.0 Introduction

Preventing and detecting illegal traffic of wastes requires the co-operation of multiple entities such as enforcement entities, ranging from the international level to the domestic level. Customs officers within a country, for instance, cannot combat illegal traffic alone. They rely on the relevant national environmental agencies to provide them with the appropriate legal and technical information, equipment and facilities. On the other hand, national regulatory and enforcement agencies need the support of the customs agencies.

Many environmental, public health, and other agencies are involved in regulating and enforcing the laws regarding the import and export of different goods e.g. endangered species of flora and fauna, chemical substances such as ozone depleting substances and hazardous chemicals and waste. These agencies will have the expertise to help develop the environmental components of risk profiling, based on regulatory and enforcement considerations and identify risk indicators or search parameters. Ports are the pivots of global trade and therefore the vast majority of international waste movements pass through them. This manual concentrates on the activities in ports, because this is where inspections can make the most significant impact, provided that they are well prepared, coordinated and executed. Communication in the port and beyond is therefore the key aspect, when it comes to enforcement. For that reason this manual dedicates a separate chapter to it (see chapter 3). Communication channels need to be built carefully and, once in place, they need to be maintained.

Good co-operation between environmental and customs agencies in the ports will help these authorities identify and respond to dangerous or unlawful trade and promote legal and safe trade. Various competences and powers, jurisdiction and different sources of information justify the need for such co-operation.

Due to the international aspect of transboundary movements of hazardous waste, collaboration at the international level is crucial. Besides the key issues concerning national collaboration, this chapter will also introduce some international mechanisms to collaborate and exchange information with a list of such entities and organizations and description of their tasks.

2.1 Actors in the port

A number of entities and organizations are operational in ports, each of them having their own tasks, responsibilities, competences and access to various types of information. Hereunder is a non-exhaustive list of such actors.

2.1.1 Private/Commercial actors

Shipping line – a company that operates ships and transports containers.
Shipping/booking agent – a person or company that prepares shipping documents, arranges shipping space and insurance, and deals with customs requirements.
Freight forwarder/forwarder/forwarding agent – a person or company that organizes shipments for individuals or companies and may also act as a carrier.
Stevedore/dock worker – a person or company that is responsible for the loading and unloading of ships, stowing of cargo and handling hazardous materials.
Carrier/haulier – a person or company that transports the goods for any person or company and which is responsible for any possible losses during transport.

In terms of detecting illegal imports of e-waste all these actors can have (a piece of) information that might indicate the (illegal) transport of e-waste into the port. Investigating the role of these actors and the information they hold is useful for the enforcement agencies.

2.1.2 Governmental agencies

Customs – an authority or agency in a country responsible for collecting and safeguarding customs duties and for controlling the flow of goods including animals, transports, personal effects and hazardous goods in and out of a country. Depending on local legislation and regulations, the import or export of some goods may be restricted or forbidden. The customs agency enforces these rules.
Port authority – an authority that is responsible for the management of the port(s) and is, for example, informed about the movements of hazardous materials through the port. Port authorities may be public or private organizations, or a combination of the two.
Environmental agency – an agency responsible for ensuring compliance with national and possibly international environmental laws and regulations for developing policies and rules and for issuing permits.
Competent Authority of the Basel Convention – an agency responsible for receiving the notification of a transboundary movement of hazardous wastes or other wastes, and any information related to it, and for responding to such a notification. It is often the Ministry of Environment or Environmental Protection Agency or both who are designated as the Competent Authority of a particular country.
Port police – a dedicated police unit operational only in the port.

In addition, other agencies who deal with subjects such as 'health and safety' or 'national security' can also be active in the ports.

2.2 Key issues of communication and collaboration

2.2.1 Collaboration and communication at a national level

There are two key types of collaboration: at a formal and an informal level. It is, however, recommended to aim for a formal model of co-operation. Examples of a formal co-operation include an agreement between relevant agencies (e.g. Memorandum of Understanding or MOU), rules of procedure for communication and the formulation of guidelines.

Useful steps to set up the co-operation between agencies that are responsible for the monitoring of UEEE / e-waste imports include:

- Identifying concerned ministries and agencies, and within these organizations the key personnel with (environmental) enforcement responsibilities;
- Establishing relations and communication channels;
- Discussing and developing objectives, means and areas of cooperation;
- Formalizing cooperation by agreeing upon, signing and implementing an MOU to enable operational enforcement cooperation among ministries and agencies.

Legal basis:

- Which authority has which competences and responsibilities
- Which national laws apply

Implementation - how we will work together to:

- Develop risk indicators and profiling methods
- Conduct inspections & import/export control measures
- Handle non-compliance
- Deal with the take back procedure for illegal shipments of waste
- Deal with the ESM of wastes that are not taken back by the exporter

Planning - how we will work together to:

- Set priorities
- Develop an enforcement plan
- Develop risk profiles
- Evaluate our joint efforts
- Ensure that our staffs are appropriately trained and equipped

Textbox 7: *Essential elements of a MOU*

Negotiation of an MOU or any form of a formal agreement takes significant time and efforts but there are clear advantages because the MOU establishes relationships between different government agencies or departments whose joint or shared efforts are required for success.

An example of the MOU is available in Annex C1.

Inter-agency agreements can be developed at different levels:

- **Strategic level**
  The MOU facilitates collaboration at a strategic level. It addresses questions, such as what is the overall aim of this collaboration? How can the different tasks of the governmental agencies complement each other in order to tackle the range of issues in question?

- **Action-oriented task force**
  When MOUs are inspection-oriented, the participating agencies form a task force and describe when action will be taken and what will be the extent of contribution of these agencies. The 'task force' prepares an inspection action in the port, the members of the 'task force' meet and agree on the details of such an action, using the provisions of the MOU as a basis.

- **Ad hoc or on a case-by-case basis**
  On a practical level, the MOU is often needed for the detailed handling of an individual case. In case of individual containers that raise suspicion, a more detailed communication procedure should be agreed upon.

In December 2010 the Belgian cabinet agreed on a formal collaboration agreement between the Environmental authorities, Customs, Police, Ministry of Justice and the Public Prosecutors Office. The original agreement dated from 1994 had never been implemented. Due to an increased political awareness and attention by the media concerning the illegal export of waste, it was recognized that the problem could be addressed only by collaboration between the relevant authorities. Therefore it was decided to renew the agreement. The content of the agreement was negotiated for two years between those involved.

The document includes agreement on the following issues, inter alia:
- Customs will focus their activities to increase the detection of illegal waste shipments;
- The authorities involved will provide mutual support in terms of training, technical assistance and physical support;
- The exchange and sharing of information.

A task force was established to further elaborate the procedures for inspections, enforcement and prosecution, to agree on joint priorities, to streamline the exchange of information, and to share policy positions.

Textbox 8: *Example of inter-agency collaboration in Belgium*

In the Netherlands the Ministries of Finance and Environment have signed an MOU in which they agreed on mutual training and support, information exchange and joint inspections. Under this MOU appointed Customs officers received training on the Basel Convention and the European WSR. They were trained to identify possible suspicious containers based on the documents and labels on the outside of the container and to recognize waste. In case of a possible illegal shipment of waste, the Custom officer blocks the container for further investigation and contacts the Environmental Inspectorate. Together, the two authorities perform the physical inspection of the container at a dedicated inspection area of the port terminal. The decision as to whether the shipment is illegal or not is taken by the Environmental Inspectorate. In case of non-compliance, the Custom officer writes the official report which is then sent to the Public Prosecutor's Office. The Environmental Inspectorate is responsible for ensuring that the shipment is taken back to the place of origin.

Textbox 9: *Example of inter-agency collaboration in the Netherlands*

Confidential information, like personal data or tax-related data, must only be used and shared when necessary; only amongst the law enforcement authorities, that are working on a particular case; and only as permitted within the framework of the national laws. Defining which information/data falls into this category should be determined prior to the start of an investigation. One should be aware that the leakage of information to third parties, such as the press, could jeopardize the investigation and/or the safety of enforcement officers.

2.2.2 Collaboration and communication at the international level

Two or more countries are involved in a transboundary movement of hazardous and other wastes: the country of export and the country of import and sometimes country(-ies) of transit. In order to monitor transboundary movement of waste, countries need to be in close contact with each other.

Formal collaboration mechanisms at the international level

At the formal level, the **Basel Convention Focal Points** are responsible for sharing information with the Basel Convention Secretariat. **Competent Authorities** are governmental authorities tasked with receiving the notifications of a transboundary movement of hazardous wastes or other wastes and with responding to such notifications.

The exchange of information is crucial to ensure that Parties are equipped with the necessary information to allow them to make well-informed decisions on the transboundary movements and, therefore, subsequent management of hazardous wastes. The Competent Authorities can also be contacted by other countries in case of questions or concerns related to (illegal) movements of hazardous and other wastes. The list of Focal Points and Competent Authorities is available on the website of the Basel Convention[9]. The Secretariat of the Basel Convention is also mandated to assist Parties upon request in the identification of cases of illegal traffic.

INTERPOL is the world's largest international police organization, with 190 member countries that facilitates cross-border police co-operation, supports and assists all organizations and authorities whose mission it is to prevent or combat international crime, including environmental crime. INTERPOL has a General Secretariat and seven regional bureaus strategically placed around the world. At the national level, INTERPOL member countries are connected to the National Central Bureau. INTERPOL has developed the Ecomessage system, specifically for the exchange of information related to environmental crime. Law enforcement officers that discover an illegal shipment of wastes are encouraged to complete the Ecomessage form and submit it to the INTERPOL Environmental Crime Programme, via their National Central Bureau. For more information: www.interpol.int (Crime Areas - Environmental Crime) or refer to chapters 4.4.2. and 6.4.6 for further guidance on the use of Ecomessages.

The World Customs Organization (WCO) provides a global network aimed at customs officers. As information and intelligence exchange is one of the pillars of the WCO's enforcement strategy, the WCO has set up a global network of **Regional Intelligence Liaison Offices**[10] (RILOs). The RILO is a regional centre for collecting, analysing and supplementing data, as well as disseminating information on trends, modus operandi, routes and significant cases of fraud. The RILO mechanism is supported by the Customs Enforcement Network (CEN), a global data and information-gathering, analysis and communication system for intelligence purposes. The aim of this mechanism is to enhance the effectiveness of global information and intelligence exchange as well as co-operation between all the Customs services tasked with combating transnational crime.

The **WCO ENVIRONET**, launched in June 2009, is an internet-based global communication tool dedicated to environmental protection. It provides a secure platform for officers from customs, law enforcement authorities and international organizations as well as their regional networks, to co-operate with each other and share real-time information in the course of their daily operations. ENVIRONET has connected more than 1,100 users from over 110 countries and international organizations, the majority of whom are frontline officers. In order to get access to ENVIRONET, contact the WCO via www.wcoomd.org.

Informal collaboration mechanisms on the international level

At the informal level, various regional and global networks are established to facilitate cross-border co-operation between authorities.

At the global level, the **International Network for Environmental Compliance and Enforcement**[11] (INECE) is in place. INECE is a global network of environmental compliance and enforcement practitioners dedicated to raising awareness of compliance and enforcement; developing networks for enforcement cooperation, and strengthening capacity to implement and enforce environmental requirements. One of their sub-networks, the **Seaport Environmental Security Network**[12] (SESN), is dedicated to monitoring activities in the ports that are specific to shipments of hazardous waste. SESN participants work together to build capacity, raise awareness, and facilitate enforcement collaboration on ways to detect and control illegal and dangerous transboundary shipments of environmentally-regulated items through seaports, including hazardous materials, electronic waste and ozone depleting substances. For more information: www.inece.org

An example of a regional enforcement network is the **European Union Network for the Implementation and Enforcement of Environmental Law** (IMPEL). This network is committed to contribute to a more effective application of European environmental law by capacity building, awareness raising, sharing good practices, providing guidance and tools, enforcement co-operation and providing feedback to lawmakers and regulators on the practi-

[9] *List of Basel Convention Focal Points: http://basel.int/contact-info/frsetmain.html*
[10] *WCO RILO's: http://www.wcoomd.org/home_hsoverviewboxes_valelearningoncustomsvaluation_eprilo.htm*
[11] *Link to INECE: http://www.inece.org*
[12] *Link to SESN: http://inece.org/seaport/*

cability and enforceability of environmental legislation. One of the clusters of IMPEL called the IMPEL Transfrontier Shipment (TFS) cluster focuses solely on the area of transboundary movements of waste. The IMPEL TFS cluster consists of National Contact Points in most EU member countries. Together they perform joint inspection projects throughout the EU and share practical experiences, information and best practices. For more information: www.impel.eu

In case of a suspicious or illegal shipment of waste originating from or destined for a country in the EU, contact either the Competent Authority[13] or the IMPEL TFS National Contact Point. For more information about IMPEL TFS, you can contact: info@impel.eu.

As the larger amount of UEEE and e-waste is shipped from the EU to African countries, collaboration between the countries of these two continents is critical. Within the framework of the E-waste Africa project, an enforcement network between involved countries from the EU was established. The countries participating in the network would appoint contact points to represent relevant agencies. To support this network, a communication tool is being developed. The aim of the EU-Africa network is to communicate and collaborate, for instance on the following issues:

1. Verifications

In cases where there is doubt about the transboundary movement of UEEE or e-waste from the EU to Africa, the European authorities will communicate their opinion and position concerning the intended shipment to their African counterparts. Information and photographs of a load will be made available for the competent authorities in the countries of import. Their decision will be communicated to the country of export (or transit).

2. Alerts

Sometimes evidence arises once a container is already on its way i.e. the documentation is only available once the ship has left the port. If the documents give reasonable doubt about the load of (a) certain container(s), the European authorities would inform their African colleagues about the container(s) and ask them to perform a check once the load arrived at the port (of import or transit).

3. Taking back an illegal shipment of waste

When an illegal import is detected by the country of import, the shipment should be taken back by the country of export[14] in accordance with the Basel Convention. Communication between the involved countries is critical in order to safeguard the actual return of the waste to the country of origin. For more information about the take back procedure for illegal shipments of waste, please refer to chapter six.

4. Trends and open alerts

Certain developments, for example a change in national law or changes in the markets, may lead to new trends concerning routes and destinations of e-waste and UEEE. This is valuable information that should also be shared within the EU-Africa network.

5. Supportive tools and information

The EU-Africa enforcement network will be supported by a communication tool which enables the involved officers to share and gather information; for example guidance documents that have been developed concerning the distinction between UEEE and e-waste and on environmentally sound management of e-waste.

6. Training

Following the identification of the specific needs of participating countries in the EU-Africa enforcement network, online and face-to-face training and capacity-building activities will be carried out subject to the availability of funding.

Textbox 10: *EU-Africa Enforcement Network*

[13] Link to EU Competent Authorities: http://ec.europa.eu/environment/waste/shipments/lists.htm

[14] In certain cases the Basel Convention provides that the responsibility to take back an illegal import falls on importers. Please see chapter 6 for more information.

Example of international enforcement collaboration between the Environment Agency England & Wales and NESREA, Nigeria

In 2010, representatives of National Environmental Standards and Regulations Enforcement Agency (NESREA), Nigeria visited the Environment Agency of England & Wales, to receive training on detecting and preventing illegal shipments of waste. Following the visit, the Environment Agency provided intelligence to NESREA, via INTERPOL, regarding the export of electrical items from a site which was illegally exporting waste electrical and electronic items (WEEE), including items that were considered hazardous waste.

On receipt of the intelligence provided by the Environment Agency, NESREA intercepted the ship 'Grande America' which was waiting to enter Tin Can port, Lagos, Nigeria. Two 40ft containers were identified. They were not offloaded but a physical examination of contents was carried out on board of the ship and the contents were found to tally with the alert received by NESREA. No sampling was carried out but the physical state of the items were observed and recorded.

The inspection identified used refrigerators with compressors containing CFCs, an ozone depleting substance, old model monitors, used/old television sets containing cathode-ray-tubes, some of which did not include a power cable and used speakers. NESREA classified the waste under the Basel hazardous waste code A1180 (waste electrical and electronic components containing hazardous components), indicating that the waste contained hazardous components such as cadmium, lead and lead compounds, CFCs, CRTs, mercury, chromium and brominated flame retardants. It was discovered that the used television sets were manufactured in the early 1980s.

Documents detailed that the containers had been loaded at the port of Tilbury, UK and transited the port of Antwerp, Belgium on route to Nigeria. NESREA concluded that the shipment was carried out without the prior consent or notification of the authorities in Nigeria; was therefore in violation of the provisions of the Basel Convention and to be treated as illegal traffic under Article 9. NESREA ordered the containers to remain on board and that the ship returns to its port of origin, Tilbury, UK. A 'Form for confirmed cases of Illegal Traffic', (as adopted at the fourth meeting of the Conference of the Parties to the Basel Convention, February 1998) was completed and submitted to the Basel Convention Focal Points in the UK and Belgium, as well as to the Secretariat of the Basel Convention.

NESREA imposed a fine on the shipping agent, which was paid. A news article regarding the detention of the waste was posted on the BBC News website on 20 October 2010: http://www.bbc.co.uk/news/world-africa-11589530.

The Environment Agency contacted the Port Authority and arranged for the containers to be detained upon their return to Tilbury. The containers were inspected and the contents were removed from the containers, sampled and evidence taken by Environment Agency officers. A number of companies are currently being prosecuted and the case is expected to be concluded in 2012.

Textbox 11: *Example of successful international enforcement collaboration*

3 Port procedures

3.0 Introduction

This chapter focuses on the port procedures in general, with more details on the import of UEEE and e-waste and communication and collaboration in the ports.

Having an insight into the port procedures and administrative processes will help the inspecting authority to assess the import of goods and waste and select possible suspicious containers for further investigation.

As most e-waste is transported across borders as used or second-hand equipment, either deliberately or unintentionally, the procedures for both UEEE imports and e-waste will be discussed.

Customs are the relevant authority to verify the imports of goods and clear them for further distribution. In the case of waste imports, other authorities, such as the environmental agencies, might also play a role in this verification process.

3.1 Communication and collaboration in the port

As underlined in the previous chapter, preventing and detecting illegal traffic of hazardous waste requires the co-operation of all enforcement agencies at the national level and in the port.

Chapter 2 provides information on various forms of co-operation: at the formal or informal level. It is, however, recommended to aim at a formal form of co-operation.

It is recommended to identify, for each country, those authorities that have a (shared) responsibility to check imports of goods and waste into their country such as port authorities and other agencies.

Please consult chapter 2 for more information on how to set up co-operation between the agencies that are responsible for the monitoring of UEEE / e-waste imports.

3.2. Import procedures

3.2.1 General requirements for import

Customs clearance procedure

All imported goods, whether they are raw materials, products, second-hand equipment or wastes, have to pass through customs for proper examination, appraisal, assessment and evaluation as part of the clearance procedure. This enables the customs authorities to charge the proper tax and also check whether the goods are not illegal imports. Duty rates, customs clearance and entry processes differ from country to country. Customs rely on their assessment during administrative checks of the imported goods, although in some cases physical checks of the load are also performed.

Additional clearance procedure

In some countries, the import of UEEE may require additional clearance, for example the requirement for importers of UEEE to be registered with the competent environmental or trade authorities. This is the case in Nigeria, for example, where NESREA is responsible for a "registration of importers of used EEE in Nigeria".

3.2.2 Administrative procedure

All transboundary movements of goods and waste are accompanied by certain documentation. Key reasons for using documentation are:

- To provide a description of the cargo and classification;
- To indicate ownership of goods for collection or in the event of a dispute;
- To comply with international and national shipping rules for certain materials, such as hazardous and other wastes and dangerous goods.

The type of documentation required often depends on the Incoterm (international code for delivery) used for the contract. In 2010 the following Incoterms applied (see also Annex C5):

For any mode of transport:

- CIP – Carriage and Insurance Paid
- CP – Carriage Paid To
- DAP – Delivered At Place
- DAT – Delivered At Terminal
- DDP – Delivered Duty Paid
- EXW – Ex Works
- FCA – Free Carrier

For Sea and Inland Waterway Transport only:

- CFR – Cost and Freight
- CIF – Cost, Insurance and Freight
- FAS – Free Alongside Ship
- FOB – Free On Board

Textbox 12: *Incoterms 2010*

Also the status of the goods or equipment i.e. whether this is waste or second-hand goods, will determine what types of documents must accompany the shipment. A freight forwarder will usually assume responsibility for export documentation on behalf of the exporter / notifier.

Assessing the documentation which accompanies a container subject to a transboundary movement will be the first step in the investigation and verification process.

3.2.3 Commercial documents

Commercial invoice: a bill for the goods, including product description, shipping marks, price, etc. The invoice must meet the requirements of customs authorities in both the import and export countries, as it is used for making customs duty assessments.

Pro forma invoice: this type of invoice is used in advance of the commercial invoice, for instance, when an importer has to make foreign currency available in advance or has to acquire an import licence.

Export Cargo Shipping Instruction (ECSI): this document is issued by the exporter to the forwarder or carrier, setting out the terms and conditions for the movement of goods and who is responsible.

3.2.4 Formal documents

Single Administrative Document (SAD), also known as the C88: this document is required for goods exported from, imported to and transited through the European Union member states.

Export licence: required for certain goods to be exported legally (e.g. drugs, chemicals, waste etc). It is frequently the exporter's responsibility to ensure that a licence is obtained when necessary.

Certificate of origin (C/O): this is a statement on the origin of the goods. It may be required in addition to the commercial invoice and is available from Chambers of Commerce for goods of any origin.

Movement certificate: this is required when goods that qualify as EU-originating goods are being exported from the EU to a country covered by EU trade agreements. These certificates ensure preferential tariff treatment.

Import licence: some countries may require import licences for certain or all goods. It is normally the customer's responsibility to comply with import procedures, but it makes sense for the exporter to confirm that this requirement is met.

Inspection or test certificate: is recommended that this be provided by the exporter to confirm that the shipped goods meet their specifications. Please see also chapter 5.

In the case of UEEE, the test certificate gives an important indication concerning the status of goods

Test certificates are not a legal requirement; however, the European Correspondence Guidelines on e-waste, which are not legally-binding, suggest that evidence of testing of each item can indicate that an item is of good quality and not e-waste.

3.2.5 Transport documents

Export packing list: this document is attached to the outside of the package to be shipped and specifies the weight, volume and type of cargo.

Bill of lading: a contract between the owner of the goods and the carrier. It may describe the condition of the goods when transferred to the shipper. It also serves as a document of title. There are two types of the bill of lading:

- Straight - non-negotiable, delivery to the named person in the bill;
- Shipper's order - negotiable, delivery to a designated person. It can be bought, sold or traded while goods are in transit (e.g. can be used in credit transactions, where the bank can release the title to the goods to the buyer when payment is received).

Cargo manifest: when quantities, weights or contents of the various packing cases in an export shipment vary, it is common to prepare a separate list for each case indicating its contents, weight and measurements. It also often includes the outside dimension of each case, the total cubic content and the total weight of the shipment. Usually, cargo manifests or packing lists are not specifically required by the customs authorities in importing countries. However, they serve as useful supplements to the commercial invoice that accompanies the export shipment.

Dangerous goods note: this is required when hazardous or potentially hazardous goods are shipped. The exporter must provide the transporter with full details of the goods including the official 'class' of danger to which they belong, according to the (most predominant) hazard they represent[15].

3.2.6 Electronic export declarations

In some countries, it is possible to undertake the customs declaration procedure electronically. The declaration is entered in a web-based computer system and then electronically sent to the customs database. Supporting documentation can also be submitted this way. Customs will check the data and subsequently send the exporter an electronic notification. This notification will state, for example, that the exporter may proceed with the intended export of the goods or that customs wants to carry out further inspection of the goods. This notification will also show the amount of duties and levies that have to be paid on these goods.

Electronic declarations are completed by using Electronic Data Interchange (EDI) messages. These are electronic message in a standardised format to allow electronic communication with a tax administration.

3.3 Transboundary movements of UEEE and e-waste

3.3.1 Administrative procedure

There is a significant difference between the requirements for goods and hazardous and other wastes. However in both cases, additional information needs to accompany transboundary movements. In order to distinguish e-waste from UEEE, certain criteria need to be met.

Please consult chapter 5 for further details. This chapter is based on the "(draft) Technical Guideline on Transboundary Movements of Used Electronic and Electrical Equipment and E-waste, in particular regarding the Distinction between Waste and Non-waste under the Basel convention", developed by the intersessional working group under the Basel Convention. The latest version of the guidelines (May 2012) with comments from Parties is available on the website of the Basel Convention. The guidelines are yet to be approved by the Conference of the Parties to the Basel Convention.[16]

The following documents may be encountered, depending on the character of the goods or wastes:

Inspection or test certificates

These are required especially when the goods are being imported as UEEE. By supplying inspection or test certificates, the importer makes an effort to prove that the goods are indeed fit for direct use.

Chapter 5.2 describes the requirements for transboundary movements of UEEE in detail.

Notification and Movement Document

When the subject of import or export is hazardous e-waste, (or when Basel Convention Parties have agreed to make the same procedure apply for non-hazardous waste movements) a procedure involving prior written notification and prior written consent applies.

[15] *UN Recommendations on the Transport of Dangerous Goods; http://www.unece.org/trans/danger/danger.html*
[16] *The full text of this Technical Guideline is available at: http://www.basel.int/Implementation/TechnicalMatters/DevelopmentofTechnicalGuidelines/Ewaste/tabid/2377/Default.aspx.*

Specific documents are to be used to notify the competent authorities in the concerned countries of all transboundary movements of hazardous wastes and other wastes and, subsequently, to accompany the movement of waste. Competent authorities will issue these documents, which consist of two forms: the notification and the movement document.

The notification and its annexes are designed to provide detailed, accurate and complete information of the parties involved with the movement(s), on the waste itself, on the type of disposal operation to which the waste is destined, and on other details relating to the proposed movement. This information will allow the competent authorities concerned to be sufficiently informed to make a judgement on whether to object or consent to the movement, in accordance with the Basel Convention and relevant national legislation. Annex V A of the Basel Convention lists which information needs to be provided on the notification.

The movement document is intended to accompany the consignment at all times from the time of departure from the waste generator to the arrival of the consignment at the disposer in another country. The movement document provides relevant information on a particular consignment, for example, on the carriers of the consignment, passage through customs offices, and the receipt and disposal of waste by the disposer.

It has been recommended by the Conference of the Parties that the duly completed notification should always accompany the movement document. Most of the countries accept a copy of the duly completed and fully authorized notification to be enclosed with the movement document.

When the so-called 'Ban Amendment' (please see Glossary and textbox 2) to the Basel Convention enters into force, any export of hazardous waste from the group of countries consisting of OECD-member states, the EU member states and Liechtenstein to countries outside of this group will be directly banned, whether it concerns export for disposal, recovery or reuse. During the tenth meeting of the Conference of the Parties to the Basel Convention, held in October 2011, significant progress was made towards clarifying legal aspects to enable the Ban Amendment to enter into force.

In the case where goods are being imported or exported as non-hazardous e-waste, the Basel Convention does not foresee a specific procedure. However, importers or exporters may – under national legislation and regulatory requirements or voluntarily - decide to follow the procedure involving the prior written notification and prior written consent. This procedure is explained briefly below and in more detail in paragraph 5.3 of this manual.

Other waste movement documents

In addition, certain Parties have implemented procedures, such as those applicable to transboundary movements of 'green'-listed waste (mainly non-hazardous waste) under EU legislation. If this green-listed waste is indeed allowed for import or export, then a so-called 'Annex VII-form' is required to accompany the shipment. Please see the box 2 on 'Additional administrative procedures for e-waste movements from the EU to non-OECD countries'.

Contract between waste producer and waste processor, guaranteeing ESM of the waste

The existence of a contract between the exporter and the disposer specifying environmentally sound management of the waste in question is an important precondition for the authorization of the transboundary movement of waste.

In general, contracts should confirm that the carriers, traders, and disposal facilities operate under the legal jurisdiction of the Contracting Parties to the Basel Convention and have appropriate legal status. They must be licensed or otherwise authorized, approved, or "recognized" by the competent authorities of the State of export, State(s) of transit or State of import.

The assignment of legal responsibility and liability in contracts for any adverse consequences resulting from mishandling, accidents or other unforeseeable events, assists the competent authorities in identifying the responsible

parties at any given moment, in accordance with national and international rules and regulations. The contract should also specify which party shall assume responsibility for alternative arrangements in cases where the original terms of the contract cannot be fulfilled.

Additional administrative documents required for e-waste movements from the European Union to non-OECD countries

Only e-waste classified as non-hazardous waste can be exported for recycling purposes from the EU to non-OECD countries; and then only if the importing countries allow their import. All exports of e-waste classified as hazardous waste, either destined for recycling/recovery or final disposal, or non-hazardous e-waste destined for final disposal to non-OECD countries is prohibited.

The legal basis for the export of non-hazardous waste out of the European Union varies, depending on the country of import and the specific type of waste (see further: Annex A2). This implies that the export for recycling purposes to non-OECD countries of non-hazardous e-waste is either:

- Prohibited;
- May be permitted but only through a procedure of prior written consent or notification;
- In rare cases, may be permitted under national legislation or regulations of the country of import, with the only administrative obligation to have the shipment accompanied by a specific waste movement document; the so-called 'Annex VII' document.

When prior written consent is necessary, additional documents, such as the waste movement document and other relevant documents as required and recommended by the provisions of the Basel Convention must accompany every shipment.

Additional documents in case of UEEE imports from the EU to non-OECD countries

When UEEE is exported as a second-hand good from Europe, the European Correspondents' Guideline N°1 on shipments of e-waste requires that test certificates must accompany the load stating that the equipment has been tested and is working properly.

Even though these Correspondents' Guidelines are not legally-binding within the EU, they provide helpful guidance to determine whether the goods should be considered as waste or not.

Depending on the national legislation in force, such test certificates may also be required for the import procedure. In addition, and again depending on national legislation, other specific documentation may also be required.

Textbox 13: *UEEE or e-waste from the EU to non-OECD countries and specific administrative requirements*

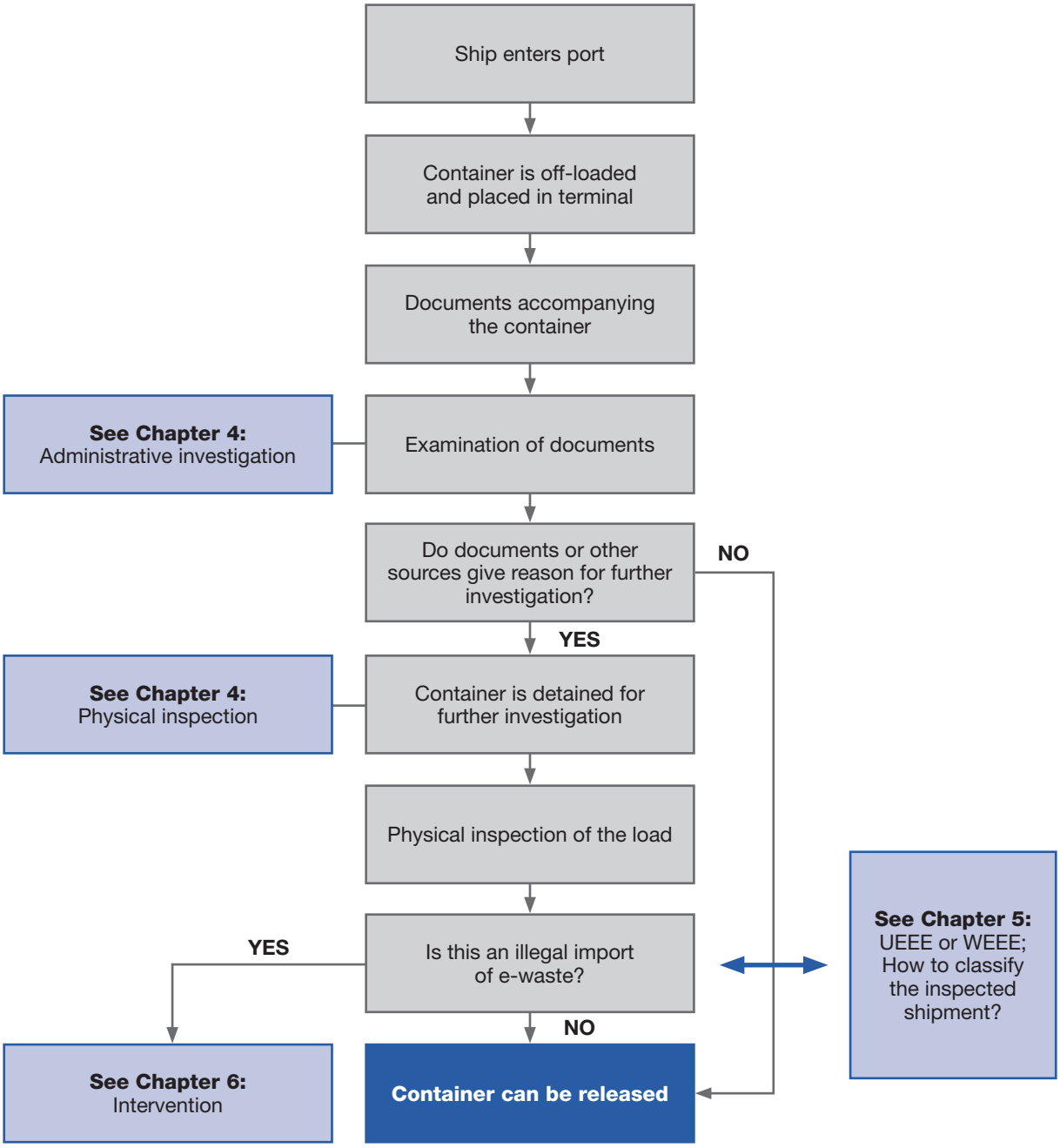
3.3.2 Physical procedure

The physical route and procedure that the shipped containers go through consists in general of the steps described below:

- The container is off-loaded from the ship by the handling company and placed in the container terminal until customs check all the paperwork;
- If the documents of the load provide certain indications that the shipment contains e-waste and not UEEE, such as a very low value of the goods, or the statement 'not tested' or hit a risk profile, the container is blocked for further investigation and cannot leave the terminal (see chapter 4 on Inspection and investigation);

- If it is decided to perform a physical inspection of the load, the container is then moved to a dedicated inspection area. Here customs and other relevant agencies can open the container and have it unpacked to check the contents of the container;
- Depending on the outcome(s) of the physical inspection, the container may be released and cleared by customs in which case the container can leave the terminal;
- If further investigation is necessary, such as sampling or contacting the exporter of the goods, the container needs to be detained in the port. The way this detention is carried out may vary, depending on requirements by the enforcement agency for additional investigation and depending on specific logistic conditions in each port (see chapter 4 on Inspection and investigation);
- If the import is legal, the container is released;
- In the case of the illegal traffic of e-waste, the load remains blocked and the take back procedure is initiated and followed (please see chapter 6 on Intervention).

The decision tree below describes the route of a container and decision points for further investigation.



Decision tree 1: *Container routing and investigation guidance scheme*

4 Inspection and investigation

4.0 Introduction

With the term 'investigation' we refer to a number of different activities that, together:
- ensure successful enforcement;
- do not rely on accidental findings;
- are necessary to obtain valid evidence for successful prosecution.

With the term 'inspection' we refer to a more specific, single activity. There are two types of inspection:
- the administrative inspection, involving the inspection of documents, etc.;
- the physical inspection, involving the actual close observation of the goods transported.

Investigations and inspections may complement each other. For example: one inspection may lead to a more in-depth investigation. In another situation during an investigation the decision can be made to carry out a number of a specific type of inspections.

In the case of UEEE or e-waste shipments, which contribute to already existing challenges related to e-waste in the country of import, these shipments may become subject to a well-structured investigation. Different parts of such investigation are generally referred to as:
- pre-arrival;
- upon arrival;
- at the importer's site.

When focusing on reducing the flow of e-waste towards seaports in developing countries, it is essential to distinguish between UEEE and e-waste; there needs to be a clear national policy regarding where to draw the line between these two categories. Assuming these requirements are in existence, the purpose of this chapter is to provide different options for investigations and/or inspections of this waste stream. They depend on national legislation[17], which often exists and which offers appropriate provisions applicable to customs, police, port authorities and other enforcement agencies.

The availability of a national hazardous and other wastes-related legal and regulatory framework to implement the Basel Convention should be used in conjunction with existing legal instruments and powers of the other aforementioned enforcement agencies. It is also useful to have a national or regional policy on e-waste, as this will assist in the credibility of investigations and inspections of imports of e-waste.

4.1 Communication and collaboration during the inspection and investigation stage

Custom authorities are the key players in detecting and intercepting imports of UEEE and e-waste. A functioning communication structure between customs and environmental authorities, such as the national Focal Point of the Basel Convention, is essential for the prevention and detection of illegal transboundary movements of waste. Depending on their duties and powers, other enforcement authorities should also be included. Further guidance on establishing a successful communication structure is provided in chapter 2.

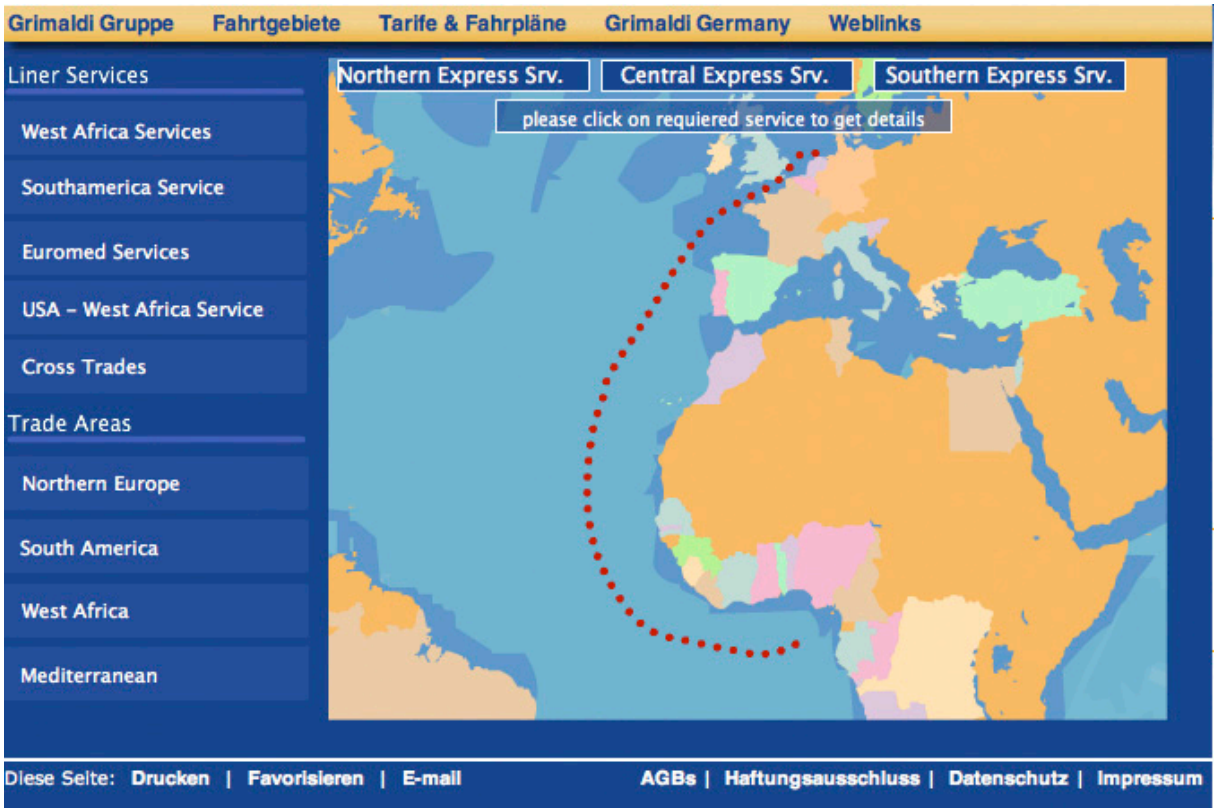
The access to and handling of confidential information, like personal data or tax-related data, is another key point. Such data should only be used when necessary and then to a minimal extent; it should only be shared amongst the enforcement bodies assigned to a particular case. Defining which information/data falls into this category should

[17] National legislation could be a wide spectrum of laws and regulations related to the environment, hazardous waste, waste management, air, water, flora, fauna pollution protection, and protection of human health.

be determined prior to the investigation. It is essential that any applicable legislation relating to personal data and data protection is complied with.

Experience shows that communication between the government agency and the commercial actors is just as important as communication between the governmental agencies. Certain European Environment Agencies, e.g. the Environment Agency in England and Wales, have successfully collaborated with a number of shipping lines. It is useful to have a list of agents, who represent the shipping lines, or details of the offices of the shipping lines which sail into each particular port on a regular basis so that these companies can be contacted to obtain further information.

An example of a shipping line that serves West Africa from both Europe and the USA is shown in the map below. Note the container tracking link in the upper right corner of the image, this refers to the possibility to track containers on board the vessels. Another publicly available method for container tracking is: www.track-trace.com/container.



Map 2: *Example of a shipping line, which serves West Africa and Europe/USA*

For example, information contained within shipping manifests, can be used to determine the type of cargo being declared as EEE, either new, used or maybe e-waste and exporter and importer involved or involvement of the exporter/importer in previous suspicious imports.

4.2 Administrative investigation

4.2.1 Pre-arrival investigation

Pre-arrival investigation will naturally be intelligence-led and mainly based on accompanying documents, which are gathered, as far as possible, beforehand from electronic databases, intelligence reports, etc. Based on this information, a risk profile can be developed. A risk management programme is a strategy to address potential import (and export) problems. It helps to answer the following questions:

- Which shipments (containers or trucks) to choose for further investigations or physical inspection, how and why?
- What types of further investigation or inspection are to be carried out?
- How quickly should further investigations or inspections be carried out?
- What actions to take if breaches of laws have been identified?

Risk indicators and search parameters are at the heart of a risk management programme. They flag potential problems with a shipment. These parameters may include information such as:

- Customs tariff code – see also Annex A2 for correlations between waste codes and HS codes;
- Description of goods;
- Value in relation to weight;
- Country of export (country of transit, country of import);
- Names (addresses) and/or number of imports, exporters and/or trading companies;
- Delivery conditions;
- Packing methods; and
- Any combination of these parameters.

It is possible that customs has a risk management programme already in place, possibly in cooperation with an environmental, public health or other authority, possibly supported by an inter-agency MOU (see chapter 2 for further information about formal collaboration). Such a programme could cover issues related to the import and export of flora and fauna, endangered species, hazardous chemicals and others (see chapter 1 for a listing of relevant international and regional multilateral environmental agreements).

These collaborating agencies will have the expertise to assist customs in developing the specific components of risk management programmes, based on regulatory and enforcement considerations, and to identify the risk indicators or search parameters for detecting illegal traffic of e-waste. Co-operation between environmental and customs agencies in the ports will help authorities identify and respond to dangerous or unlawful trade and promote legal and safe trade. Various competences and powers, different sources of information and jurisdiction justify the need for co-operation. A suspicious load may be identified using gathered information. If the suspicion appeared before the arrival of the ship, preparations can be made for the inspection of the container and the accompanying documents upon arrival.

In Lagos, Nigeria there are at least four state authorities involved in enforcement in the ports. Together, they constitute the 'enforcement structure' in the ports.

- Federal Ministry of Environment
- National Environmental Standards and Regulations Enforcement Agency
- Nigeria Custom Service
- Nigeria Ports Authority

Textbox 14: *Enforcement structure in Nigerian ports*

It is useful to set up a national investigation committee with representatives from all involved authorities. This committee must co-ordinate the collaboration and decide who is in charge of the regular investigations and possible physical inspections that may need to be carried out and who undertakes any follow-up actions, when necessary. Details on roles and duties of this co-operative group can be specified in an inter-agency agreement (see chapter 2.2 for further advice on setting up an MOU).

In October 2011, at the National Workshop in Egypt held under the SBC e-waste Africa project, the participants were committed to establish committee consisting of representatives of all the Enforcement agencies who were empowered to make decisions, to resolve the issue of accumulated wastes located at the Alexandria port. It is envisaged that this model can be replicated to address issues regarding illegal traffic of e-waste both nationally and internationally.

Textbox 15: *Enforcement collaboration in Alexandria, Egypt*

4.2.2 Documentation analysis

A large part of the required documentation should be present on the ship. This is usually held by the captain and/or attached to the goods / container. The shipping manifest and Bills of Lading (B/Ls) should have been sent in advance to the destination port. All documents may be relevant in determining whether the items are new EEE, UEEE or e-waste. A list of available documents is detailed in chapter 3. Documentation analysis is at the core of an administrative investigation. It consists of a comparison of the key documents, listed below, whether paper-based or in the digital form, and compliance with the relevant international and national legislation and policies.

For example, in the case of Nigeria, textbox 16 (please see below) shows the set of documents for a particular shipment of UEEE.

An additional requirement is that the cargo manifest should list all B/Ls with at least:
- the container number, if it is containerised;
- the HS code and a short description of the content, e.g. used goods or personal items; and
- further details, describing the exact type of equipment, such as television sets, refrigerators, etc. might also be included.

Such manifests are mostly digital and the shipping lines should have them in advance, before the arrival of the ship.

Current information for Nigeria

NESREA guidance on port procedures states that the following documents must be presented to Nigerian Customs before the arrival of the ship:

- Cargo Movement Requirement (CMR);
- Proof of evaluation/testing and certificate;
- Declaration of the liability by the importer (Letter of Indemnity);
- Copy of permit to import.

This can be done through the agent of the shipping line in a particular port.

Textbox 16: *Current import requirements in Nigeria*

A pre-arrival investigation will involve accessing the cargo manifests, which should be done in a two-step approach:

- Going through the lists of the goods that are aboard a ship, that make up part of the cargo-manifest, could indicate to officers, which container could contain UEEE. In some ports on the West African coastline, this assessment is already undertaken electronically.
- Each available document should be studied for compliance and concurrence with each other. A further investigation should be undertaken only if discrepancies occur.

As the administrative inspection may be seen as a part of a larger investigation, the leading agency should be provided with a report/form detailing the suspicion of an illegal traffic and with copies of all the documents which have been examined.

The contact with the importer should address any discrepancies or point to the items that may be waste. If the importer can provide clear evidence (e.g. additional documents or a valid functionality test certificate), that the consignment is UEEE and not e-waste, then the container/load should be released. If not, a physical inspection has to be undertaken.

If a container scanner is available, it could save time and money by x-raying the suspicious load.

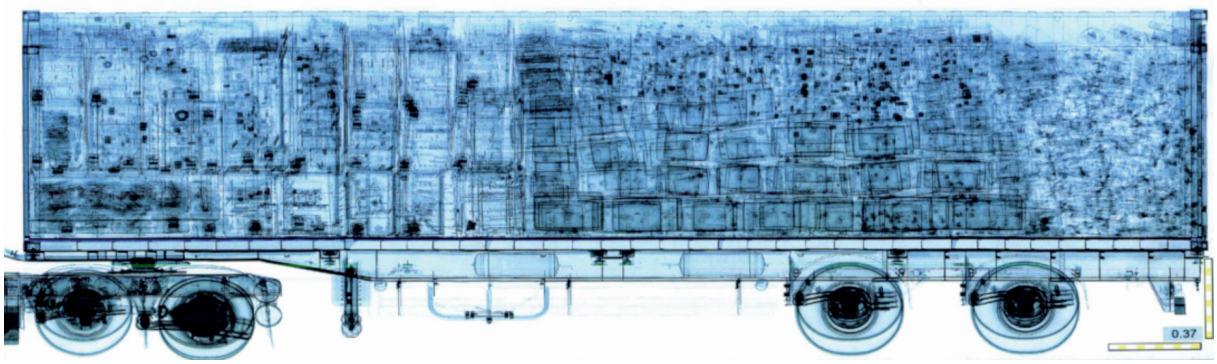
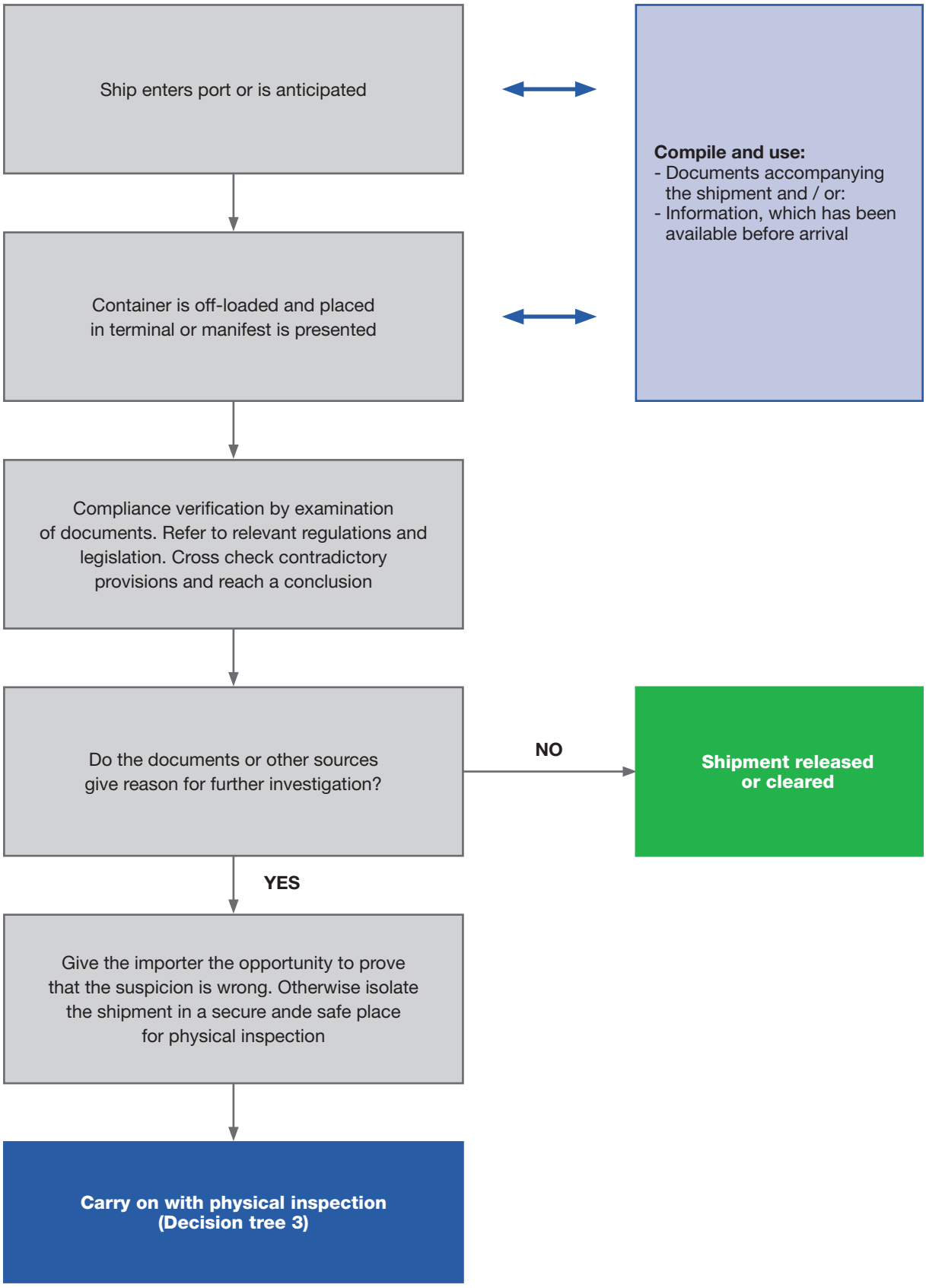


Illustration 1: *Example of a scan of a container of WEEE (waste television sets) destined for Benin and detained in the Netherlands*

The following decision tree shows different steps involved in an administrative check, whether on paper documents or (partly) digitally:



Decision tree 2: *Steps in the administration check process*

4.3 Physical inspection

4.3.1 Organizing the physical inspection

The inspection area, where containers or trucks are opened for physical inspection should be a place with a level and water tight surface and a roof, if possible. It should be fenced and if possible, lockable, for security reasons. An electric current will be required for testing purposes.

If in place, the national investigation committee, as mentioned in paragraph 4.2.1, could decide in advance on the procedures of pre-arrival and upon-arrival investigations, including physical inspections. Joint trainings are also beneficial.

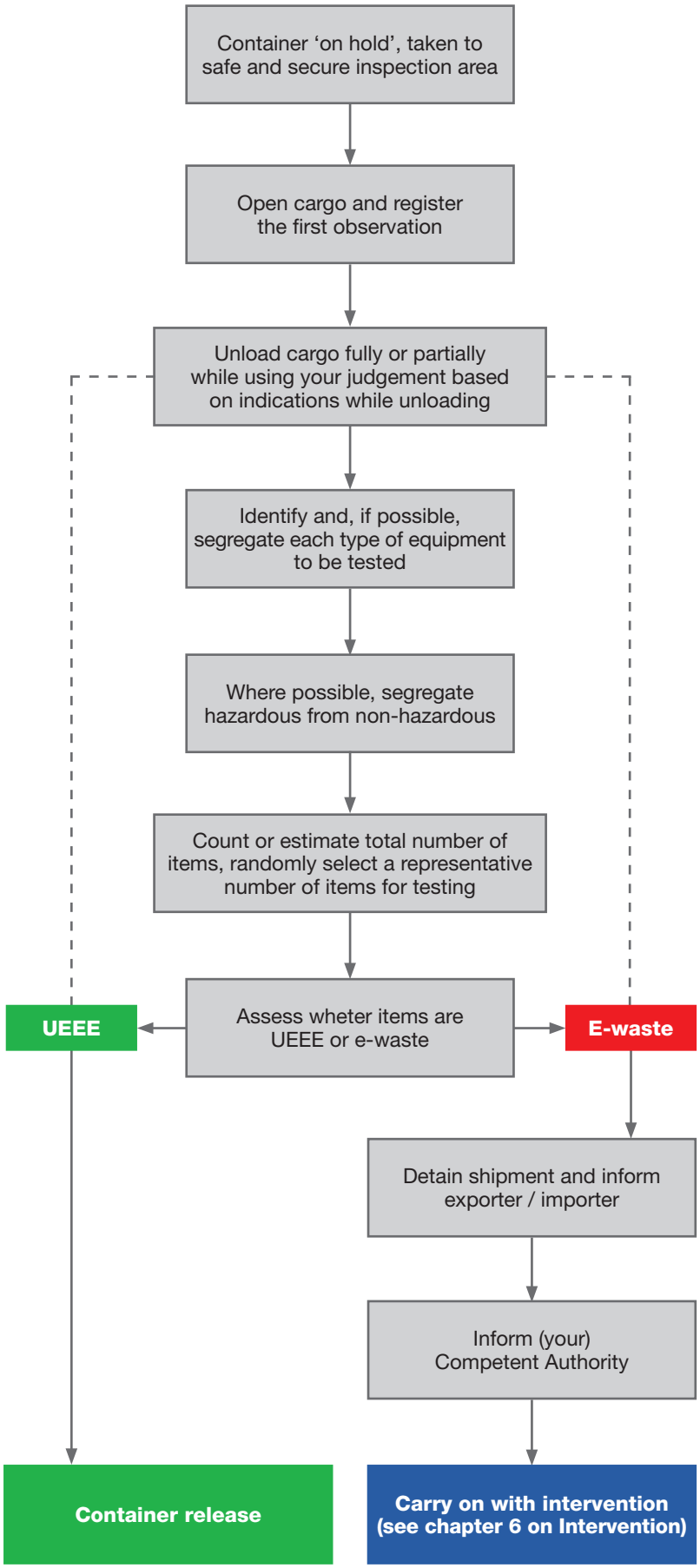
Preparations must include the decision regarding which agency is in charge of the physical inspection and who should/will co-operate and in which way. The co-ordinator must make sure that the following points are addressed before the physical inspection starts:

- date / time / location;
- required gear / safety measures;
- responsibilities (who does what – including taking photographs as evidence, testing of the equipment, documenting evidence - during the inspection and the follow-up);
- competences / legal powers (e.g. who has the power to block/detain, to open a container, to take samples, to implement the take back procedure); and
- follow-up on possible detected violations.

The following safety measures must be also taken in consideration:

- Use personal safety gear (reflecting clothes, safety shoes, helmet, gloves, etc.);
- Always use container safety chain when opening the doors;
- Some containers are loaded on their backside. When opening these containers, items can fall out;
- Be aware containers can be fumigated; and
- Be aware containers can contain radioactive material.

From the moment of arrival in the safe and secure inspection area, the procedure for the physical inspection will typically follow steps as indicated in the decision tree below.



Prior to container or truck opening:

- *Note cargo details; container numbers, truck plate, seal numbers;*
- *Photograph outside of container;*
- *Break seal;*
- *Execute fumigation test;*
- *Mount safety chain.*

While executing the inspection:

- *Register findings, step-by-step on paper;*
- *Photograph examples of all categories of UEEE and WEEE encountered;*
- *In case of doubt, retain samples of each category tested.*

See Chapter 5:

UEEE or e-waste:
how to classify the inspected shipment?

Decision tree 3: *Steps in the physical inspection process*

4.3.2 Example of an examination scheme

Below is an example of the examination scheme for used monitors (CRTs) and television sets, which can be used to distinguish between certain types of UEEE and e-waste. It is based on the Revised Correspondents' Guidelines No 1 of the European WSR and is divided according to four criteria (columns). The rows are from red to green; red indicates the equipment which is e-waste and green suggests UEEE. The colours in between (orange to yellow) indicate that further investigation is required. It is a tool that should only be used to provide a first impression and not the ultimate decision on whether the items are UEEE or e-waste.

	1. Working condition / Ability to be repaired	2. Reuse in the importing country	3. Qualified packaging
Red	Confirmation concerning function or the ability of repair is not available	Declaration concerning reuse in the importer's country is not available upon request by the authority	Items are stowed in bulk
			Clear visible differences between the front and rear stow with noticeable problems at container x-ray examination
			Unprotected screen glass on ground or container wall
Yellow	Explanation about the origin of the items without information of their functional capability	Submission of an invoice that does not refer specifically to re-use	Items are packed with things like old clothes, mattresses or similar as a protective material "wedged"
Green	Details of necessary repair provided including information about the repair company that will be used by the importer	Evidence of bills of sale with unequivocal evidence that it relates to the inspected load and to the importer	
	Evidence of a declaration by the importer that a functional test of the items has been carried out by him/her or by a third party in the country of export	Evidence provided by the importer about the location and/or the details of the repair that will be undertaken in the country of import	Palette storage foil-packed and firmly blocked or closely stacked with locking material and protective material around all single items

Textbox 17: *Examination scheme. Full matrix adjusted for the use in the context of ports of import can be found in Annex A4.*

4.3.3 Testing and sampling

Following the visual inspection of the items, the choice can be made as to whether to undertake a full functionality test of a representative sample of the inspected shipment.

The testing should be done by a person, who has the knowledge and skills of an electrician. This person or company needs to be accredited by the agency that is responsible for this part of the inspection procedure. As outlined in the flow chart above, it is suggested to separate the items into types, take photographs and list all items unloaded.

A testing procedure for electrical and electronic equipment may consist of four steps:
- visual inspection of the items;
- a Portable Appliance Test (PAT) to check the safety of the items;
- functionality test of the items;
- completing the documentation.

Chapter 5.2 and the Annex A3 provide further information on the purpose and methodology of functionality testing.

4.4 Collection and documentation of data following inspections and investigations

If there is a suspicion of the case of illegal traffic of e-waste, further investigation is required. The gathering of evidence first aims to support a decision by the Competent Authorities on what to do with the shipment: whether to allow the import, transit or export, or not. Second, the investigation aims to discover who is involved and where the responsibilities may lie. Third, it aims to collect as much proof as possible, keeping in mind a possible future enforcement action; for example a court case or, if wastes are involved and the take back procedure of an illegal shipment.

It is important to collect and report as much information related to the case as possible. Elements of a case file should include the following:

- **Document details:** who is the investigating officer, date when waste was detained, who was the exporter and importer, title of the case (e.g. WEEE export to Ghana detained in Belgium);
- **A written report on the findings:** describe all the steps of the investigation and the evidence gathered. It is important to include the circumstance of the case including what triggered the inspection in the first place, what actions were taken, why the shipment was deemed to be illegal, recommendation for further action and once concluded, an update of any enforcement action taken;
- **Originals or copies of documents that contain evidence:** the first source of written information is the set of documents that accompany the shipment. Additional information may be available from the exporter, importer, shipping lines and shipping agent. All the paperwork should be carefully assessed;
- **Copies of any forms completed during the inspections:** e.g. the completed forms listed in Annexes B1 and B2, when used;
- **Statements from persons involved or witnesses:** e.g. shipping agents, truck drivers, exporter or importer;
- **Photographs or footage of the load itself:** labels, placards, container number, container seal number; and
- **Analyses results**, if samples have been taken.

Textbox 18: *Content of a 'case file'*

The case file can be used for future enforcement actions by a prosecutor.

It is essential that any evidence is collected and stored in a professional way to ensure a successful prosecution. Defence teams will be looking to see if procedures have been followed or if there is any possibility of interference with the evidence collected, particularly if the prosecution is brought in a different country, e.g. the country of export. It is important that there is clear evidence of who has had access to the container from the time it was loaded prior to export, otherwise a defence argument may be that the items of waste were loaded by a third party or that the items became waste when they were damaged by the enforcement agencies. Chapter 6 provides further guidance under the section 'Continuity of Evidence'.

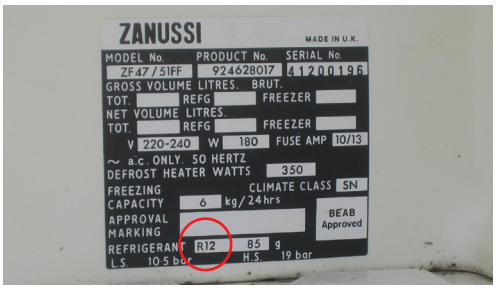


Illustration 2 : *An element of a case file: a picture showing the type of coolant used in the cooling device that was subject of a physical inspection*

Information can be stored electronically or as a hard copy or both. Storing information electronically has the advantage that it can be easily shared with other relevant authorities. Hard copies will usually be required if evidence is presented as to a prosecution. Both versions should have the same documents, scanned or printed. It is useful to have a simple database with the key points of each case to provide a reference and cross checking of former cases. Enforcement agencies should refer to their own internal procedures for the statutory length of time for keeping any evidence and case files.

There are a number of established international communication tools for exchanging information relating to enforcement activities. These have been summarised in a document produced by INECE. Below is a summary of those communication tools that are particularly relevant to cases where illegal waste shipments have been detected.

INECE identifies that the type of information that is shared and the way that information can be exchanged depends on a number of factors, including: (1) the applicable legal framework; (2) the stakeholders involved; (3) the sensitivity of the information; (4) the urgency of the particular situation; (5) human and technological resources of enforcement agencies; (6) access restrictions for certain communication tools; and (7) familiarity with available communication tools and approaches. It is of critical importance that sensitive data, such as confidential business information and information relating to criminal investigations, is adequately protected. The following communication tools may be particularly relevant for collecting information that could support the prosecution of perpetrators where an illegal traffic of e-waste has been detained depending on the applicable rules and regulations within a country.

4.4.1 The Competent Authorities of the Basel Convention

Article 2 of the Basel Convention defines a "Competent Authority" as a governmental authority designated by a Party to be responsible, within such geographical areas as the Party may think fit, for transboundary movement of hazardous or other wastes, and any information related to it, including illegal shipments of waste.

The Secretariat maintains a directory of contact details of Parties' Competent Authorities on the Basel Convention website (www.basel.int). In some cases, when updated information is still not placed on the website, it can be obtained from the Secretariat.

Who Can Use the Tool?
Anybody may communicate with the Competent Authorities.

Types of information exchanged:
Competent Authorities exchange information on detected or potential cases of illegal traffic and should cooperate closely with relevant enforcement entities when specific cases of illegal traffic arise. In some countries, Competent Authorities play a key role in ensuring that such cases are dealt with in accordance with the provisions of the Convention, using the take back procedure for an illegal shipment, when necessary (refer to chapter 6 for further guidance).

Contact:
Secretariat of the Basel, Rotterdam and Stockholm Conventions
Tel: + 41 22 917 82 18
Fax: + 41 22 797 34 54
E-mail: brs@unep.org
Websites: http://www.basel.int; http://www.pic.int; http://www.pops.int.

4.4.2 1-24/7 INTERPOL secure global communications and support system

INTERPOL facilitates assistance between law enforcement authorities through the I-24/7 secure global police communications system, which enables law enforcement in all member countries to request, submit and access vital data instantly. INTERPOL promotes the use of the Ecomessage format. This efficient format facilitates officials, agencies, the National Central Bureaus and the General Secretariat in Lyon, France in the speedy and methodical gathering, exchange, cross-referencing, recording and analysis of environmental law enforcement information.

“Ecomessages” can be drafted by any custom, police, coast guard, environmental inspectorate, prosecutor or other enforcement official that may be involved in enforcement of environmental laws. To ensure that the information is securely transmitted in accordance with all national legal requirements and procedures for the exchange of international enforcement information, the officials must forward the message through the national intelligence structure to the INTERPOL National Central Bureau (NCB). The NCB is usually hosted by the international relations department of the national police or department of justice. If necessary, the INTERPOL Environmental Crime Programme can assist to make first contact between enforcement agencies and their NCB’s.

The following types of information may be exchanged:
- Description of offense, laws violated, penalties
- Place and method of discovery
- Date and time of discovery
- Contraband products/waste
- Quantity and estimated value
- Identity of person(s) involved
- Companies involved
- Means of transport and route
- Locations (provenance, export, transit, destination)
- Documentation
- Law enforcement agencies involved
- Modus operandi

The INTERPOL Ecomessage form can be downloaded from the INTERPOL website:
http://www.interpol.int/Crime-areas/Environmental-crime/Intelligence

Contact Information:
INTERPOL Environmental Crime Programme
I.P.C.O. - INTERPOL, General Secretariat
200, Quai Charles de Gaulle
69006 Lyon – France
Tel: +33 (0) 4 72 44 71 89
Fax: +33 (0) 4 72 44 73 51
Email: environmentalcrime@interpol.int
Website: http://www.interpol.int/

4.4.3 ContainerCOMM

ContainerCOMM is a multilingual communication system developed by the World Customs Organization (WCO) Secretariat under the Container Control Programme and facilitates the encrypted exchange of information between Port Control Units.

Information can be sent by using the standard e-mail function or by way of three distinct types of pre-formatted messages:
- WARNING messages concerning the movement of suspicious containers;
- FEEDBACK messages detailing the action taken; and
- SEIZURE messages providing the type and quantity of illicit goods seized, including additional information of relevance.

By using pre-formatted messages, information can be exchanged in English, French, German, Portuguese, Russian and Spanish. ContainerCOMM includes a library as well as a 'container number checker', a tool to verify container numbers.

Contact:
Ulrich Meiser (Mr.) Senior Technical Officer
Compliance and Facilitation Directorate (Enforcement)
World Customs Organization
Tel: +32 (0) 2209 9324
Mobile: +32 (0) 478 880 670
Fax: +32 (0) 2209 9493
E-mail: ulrich.meiser@wcoomd.org

4.5 Additional investigation

When customs and environmental agencies work closely together, additional investigation at the importer's site can be undertaken. This is not part of customs' duties, however it has proven very helpful in investigating the usual operations that take place at the importer's site. For example, where e-waste is being imported as UEEE, the documentation might include a declaration that the items are charitable donations for a school. Does the school really exist or is this 'guise' for an illegal shipment of e-waste?

In the case of UEEE, the question would be to find out what will be done with the imported UEEE after its arrival; will it be sold, maybe with minor repairs, and used for its original intended purpose, such as television sets, fridges

or personal computers? Or has it been imported to obtain secondary raw material? This latter point would be an additional indicator that these items should be classified as waste.

One may also look at the **Back to Cradle Supply Chain** (see chapter 1). This is the chain of activities which extends the life of UEEE (i.e. through repair and/or refurbishment) and where secondary raw materials are extracted from UEEE/e-waste. Identifying this chain requires locating the sites at which items are dismantled, such as PWBs.

It may be possible to identify these sites because some of the elements that have been removed during the dismantling process, for example in Africa, need to be re-exported to advanced recovery facilities that are currently available mostly in the OECD. In these facilities, precious metals may be extracted from the most valuable elements such as PWBs.

From the advanced recovery facilities, situated in OECD countries, the origin of items may be traced back to the site of origin, where the crude dismantling has taken place.

4.6 Costs of investigations and inspections

Investigation and inspections are part of daily duties of enforcement agencies. From this point of view costs should be part of their budget. They may possibly claim it back from the importer. Some partial costs, e.g. preparation of the container for unloading or unloading, should be taken over by the agent or quay operator. Additional costs, e.g. for storing, testing or analyses, should be claimed from the suspect, if an illegal shipment is identified; potentially this could be through the enforcement action such as a fine or through the prosecution. Therefore, it is essential to keep proper records, as described in the previous subchapter. See also subsection on financial responsibilities in chapter 6.4.

5 UEEE or e-waste: how to classify the inspected shipment?

5.0 Introduction

This chapter offers the tools to draw a conclusion after the investigation and inspection process has been completed and all relevant data has been recorded. Does the shipment at hand concern a transboundary waste movement or not? If considered waste, is it hazardous or not? Can a waste or custom code be assigned to all items or is there a clear difference between various items of the shipment?

A conclusion and a classification are necessary before the shipment can either be cleared or detained. Please note that the conclusion needs to be backed by the provisions of the national legislation in place. Nigeria have such guidelines in place and Ghana is developing its legislation[18-19] .

The Parties to the Basel Convention are developing "(draft) Technical Guidelines on Transboundary Movements of Used Electronic and Electrical Equipment and E-waste, with particular regard to the distinction between waste and non-waste under the Basel Convention".

This chapter was prepared based on the draft guidelines, version 21 February 2011. There is also the latest version of the guidelines of May 2012 which includes comments from Parties. The guidelines are yet to be approved by the Conference of the Parties to the Basel Convention. Should the draft guidelines be adopted with significant changes, the current Manual will be revised appropriately. The full text is available at: http://www.basel.int/Implementation/TechnicalMatters/DevelopmentofTechnicalGuidelines/Ewaste/tabid/2377/Default.aspx.

5.1 Guidance on the distinction between waste and non-waste

5.1.1 General considerations

In order to determine whether used equipment is waste it may be necessary to examine the history of an item on a case by case basis. However, there are characteristics of the equipment that are likely to indicate whether it is waste or not.

Where the exporters of used equipment claim that this is intended to be or is a movement of used equipment intended for re-use and not e-waste, the following should be provided to back up this claim to an authority on its request (either generally and prior to the transport or on a case-by-case basis):

a copy of the invoice and contract relating to the sale and/or transfer of ownership of the equipment which states that the equipment is destined for direct re-use and fully functional and proof of the final destination of the equipment;

b evidence of evaluation/testing in the form of copy of the records (certificate of testing or proof of functional capability) on every item within the consignment and a protocol containing all record information (see paragraph 5.2);

c declaration made by the exporter of the equipment that none of the equipment within the consignment is defined as 'waste' by national law of the countries involved in the movement (countries of export and import, and, if applicable countries of transit); and

d appropriate protection against damage during transportation, loading and unloading, in particular through sufficient packaging and/or stacking of the load.

See also the example of the examination scheme in paragraph 4.3.2 and Annex A4. The columns are quite similar but the lines provide a differentiation between waste and non-waste and give a first indication of which direction the investigation should go further.

[18] Ghana expects to adopt the "Hazardous Waste Control Bill – A Bill Entitled the Hazardous Waste Control Act, 2011". Schedule VI of this Bill consist of the "Guidelines on the Shipments of Waste Electrical and Electronic Equipment in Ghana (WEEE)".
[19] In May 2011, in Nigeria "The National Environmental (Electrical Electronic Sector) Regulations Si No 23 of 2011" were published in the Federal Gazette.

5.1.2 Situations where used equipment would normally be considered waste or not.

Please note that information presented in the General considerations section 5.1.1 above provides a crucial point of reference to decide between waste or non-waste!

Used equipment would normally not be considered waste:

- where the criteria in paragraph 5.1.1 (a) to (d) are met and if the item is fully functional and is not destined for any of the operations listed in Annex IV of the Convention (recovery or disposal operations) and is directly re-used for the purpose for which it was originally intended or presented for sale or exported for the purpose of being returned to direct re-use or sold to end consumers for such re-use, or
- where the criteria in paragraph 5.1.1 (c) and (d) are met and if it is returned as defective batches for repair to the produce[r20] (under warranty) with the intention of being returned for re-use.

Used equipment would normally be considered waste if:

I. the equipment is not complete - essential parts are missing and the equipment cannot perform its essential key functions;

Illustration 3: *Broken and incomplete CRTs*

II. it shows a defect that materially affects its functionality and fails relevant functionality tests;

III. it shows physical damage that impairs its functionality or safety, as defined in relevant standards;

Illustration 4: *Heavily damaged and poorly packed e-equipment*

IV. the protection against damage during transport, loading and unloading operations is inappropriate, e.g. the packaging or stacking of the load is insufficient;

Illustration 5: *Bad and inadequate stowage and protection*

[20] *The facilities should apply relevant guidelines for repair and refurbishment facilities. Please see PACE Guideline on Environmentally Sound Testing, Refurbishment, and Repair of Used Computing Equipment.*

V. the appearance is particularly worn or damaged, thus reducing the marketability of the item(s);

Illustration 6: *Worn, damaged and unclean computers*

VI. the item has among its constituent part(s) hazardous components that are required to be discarded or are prohibited for use in such equipment under national legislation[21];

Illustration 7: *E-waste (components), destined for recycling or disposal*

VII. the equipment is destined for disposal or recycling instead of re-use;

VIII. there is no regular market for the equipment;

IX. it is destined for cannibalization (to gain spare parts);

X. the price paid for the items is significantly lower than would be expected for working equipment intended for re-use or

XI. it is destined for disposal operations.

5.2 Procedures for transboundary movement of used equipment that is not waste

For exports of used equipment for repair under warranty meeting the conditions in paragraph 5.1.2 (II), the exporter only has to provide a declaration that none of the equipment within the consignment is defined as waste in any of the countries involved and appropriate protection against damage should be provided. For all other used equipment that is not waste, i.e.; for direct re-use, for repair or refurbishment use of a specific procedure is recommended.

Recommended procedure to follow in case of transboundary transport of used equipment suitable for direct re-use without repair or refurbishment

Prior to any export of used equipment the exporter should be in a position to provide information to any relevant State authorities (e. g. customs, police or environmental agencies) that proves that the criteria in paragraph 5.1.1 from (a) to (d) are met. Failure to meet these criteria would generally indicate to the relevant authorities that the material is e-waste. In some jurisdictions, however, it remains for the State authorities to prove that the used equipment at issue is e-waste.

Exporters that prepare an export of used equipment rather than e-waste are recommended to take the following steps:

[21] *E.g. asbestos, PCBs, CFCs. The use of these substances is phased out or prohibited in the context of multilateral environmental agreements or in national legislation of certain countries for certain applications.*

5.2.1 *Step 1: Evaluation / testing*

Illustration 8: *Improvised set up for functionality testing*

Evaluation of the potential suitability for re-use and testing of the items that are evaluated as potentially suitable for re-use should be undertaken to ensure that used equipment is suitable for re-use. The tests to be conducted depend on the kind of equipment. Functionality should be tested and the presence of hazardous substances or components evaluated. The completion of a visual inspection without testing functionality is unlikely to be sufficient. For most equipment a functionality test of the key functions is sufficient. Paragraph 5.3 of this manual provides for guidance on the evaluation of the presence of hazardous substances and components. Annex A3 of this manual gives examples of functionality tests for certain categories of used equipment.

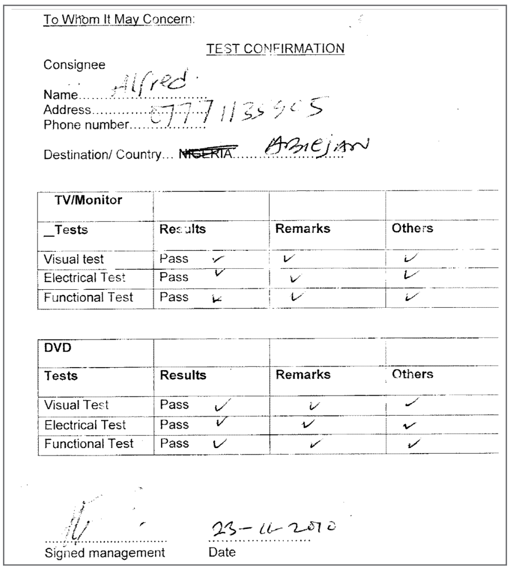
5.2.2 *Step 2: Recording (of inspection data)*

Results of evaluation and testing should be recorded and a record (certificate of testing, displaying/stating functional capability) should be placed on each tested piece of equipment.

The record should contain the following information:

a. name of the item;
b. identification number of the item (type no.), where applicable;
c. year of production (if available);
d. name and address of the company responsible for evidence of functionality;
e. result of tests (e. g. naming defective parts and defect or indication of full functionality);
f. kind of tests performed.

The record should accompany the transport and should be fixed securely but not permanently on either the used equipment itself or on the packaging so it can be read without unpacking the equipment.



To Whom It May Concern:

TEST CONFIRMATION

Consignee

Name......Alfred

Address......077 1135905

Phone number......

Destination/ Country... ~~NIGERIA~~ ABIEJAN

TV/Monitor			
_Tests	Results	Remarks	Others
Visual test	Pass ✓	✓	✓
Electrical Test	Pass ✓	✓	✓
Functional Test	Pass ✓	✓	✓

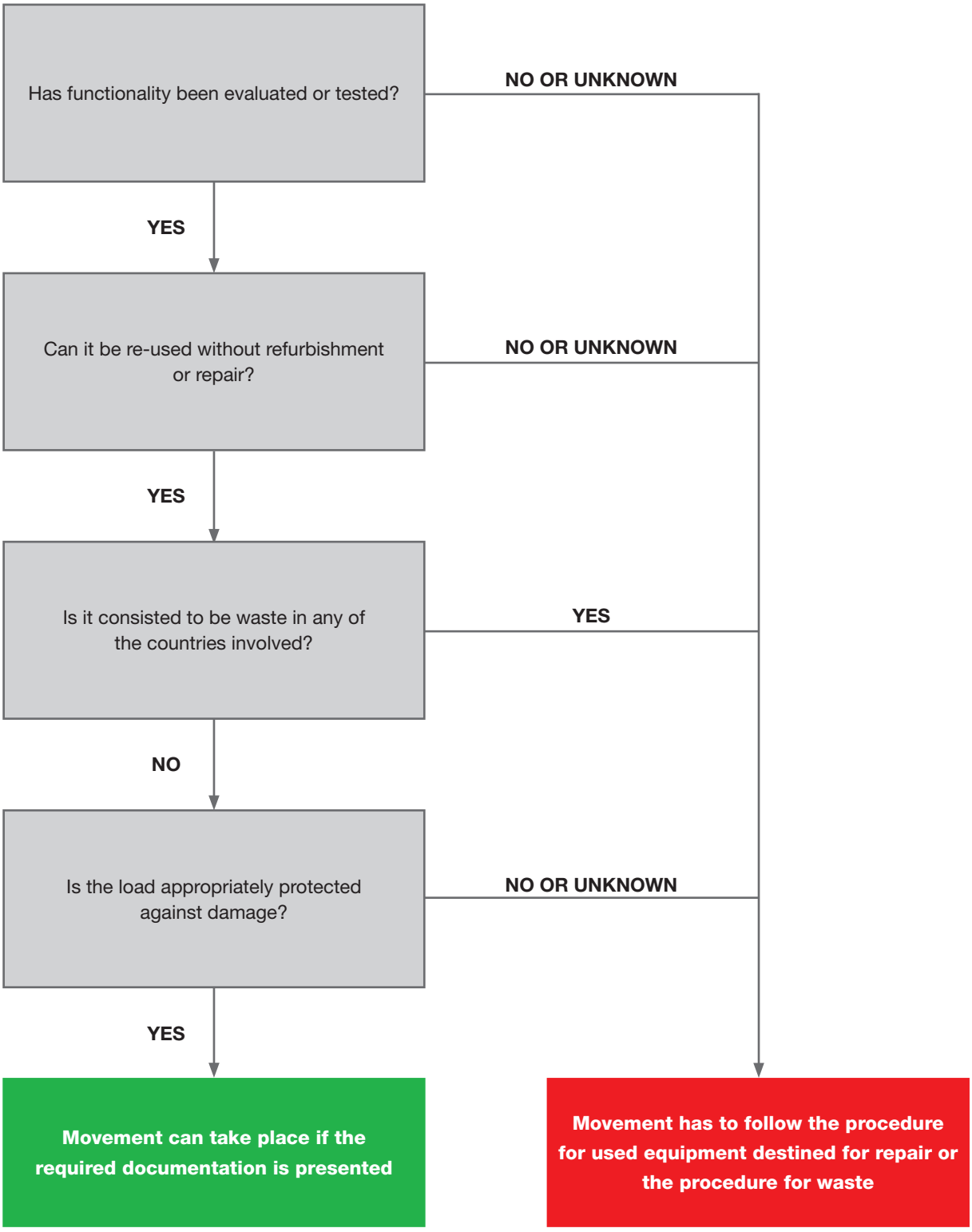
DVD			
Tests	Results	Remarks	Others
Visual Test	Pass ✓	✓	✓
Electrical Test	Pass ✓	✓	✓
Functional Test	Pass ✓	✓	✓

Signed management | Date 23-11-2010

Illustration 9: *Example of poor recording of (testing) data*

5.2.3 Step 3: Appropriate protection against damage

The used equipment should be appropriately protected from damage during transportation, loading and unloading. Insufficient packaging or stacking of the load is an indication that the equipment may be waste. In general, the observation of poor packaging or stacking of the load should lead enforcement agencies/authorities to make further enquiries regarding an item being transported.



Decision tree 4: *Recommended procedure for equipment destined for direct re-use*

5.3 Guidance on transboundary movements of e-waste

5.3.1 General considerations

When e-waste is considered to be hazardous waste according to Article 1.1 (a) of the Convention or by national legislation (Article 1.1 (b)) national import or export prohibitions should be respected. Where no such national prohibitions are implemented a procedure of prior informed consent applies. This procedure requires the waste generator to inform the Competent Authority in his country of the intended shipment by means of a 'Notification Document'. The Competent Authority in the country of export will then send this Notification to the Competent Authority in the country of import. This authority will judge the intended movement, partially based on the presence of a contract between waste generator and waste disposer that guarantees the ESM of the waste, and inform the Competent Authority in the country of export of its judgement. The Competent Authority in the country of export will then inform the notifier on the decision taken. In the case of a positive decision, waste movement documents will be issued, to be used by the exporter to accompany each single waste movement as mentioned in the original notification.

For e-waste that is not considered to be hazardous the Basel Convention does not foresee a specific procedure. However certain Parties have implemented procedures in those cases, such as those applicable for transboundary movements of 'green'-listed waste under EU legislation[22] or the procedure for pre-shipment inspection (PSI) of recycling materials as applicable for China[23].

In case a Competent Authority involved in transboundary movements of e-waste considers a specific item to be hazardous waste according to its national law, while the other authorities would not, the control procedure for hazardous waste would apply. The same mechanism is suggested for differences of opinion between Competent Authorities on the assessment; if the equipment constitutes a waste or not. In those cases the applicable procedures for transboundary movements of waste would be applied. Should this not be done, the movement has to be regarded as illegal because it would be illegal in at least one of the countries involved in the movement.

5.3.2 Distinction between hazardous waste and non-hazardous waste

Please note that paragraphs presented below provide detailed information to guide an inspector in making the distinction between hazardous and non-hazardous wastes

E-waste is included in Annex VIII of the Convention with the following entry for hazardous wastes:

A1180 Waste electrical and electronic assemblies or scrap[24] containing components such as accumulators and other batteries included on list A, mercury-switches, glass from cathode-ray tubes and other activated glass and PCB capacitors, or contaminated with Annex I constituents (e.g. cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they possess any of the characteristics contained in Annex III (note the related entry on list B, B1110)[25].

[22] Regulation (EC) No 1013/2006 on shipments of waste and Regulation (EC) No 1418/2007 concerning the export for recovery of certain waste listed in Annex III or IIIA to Regulation (EC) No 1013/2006 to certain countries to which the OECD Decision on the control of transboundary movements of wastes does not apply (see: http://ec.europa.eu/environment/waste/).

[23] PSI for recycling materials is established by the General Administration of Quality Supervision, Inspection and Quarantine of People's Republic of China (AQSIQ). Information on the procedure can be found on the web-site of the China Certification & Inspection Group (CCIC), who is authorized to handle this procedure in various countries worldwide, e.g. on the website of the CCIC in Europe: http://www.ccic-europe.com.

[24] This entry does not include scrap assemblies from electric power generation.

[25] PCBs are at a concentration level of 50 mg/kg or more.

E-waste is also included in Annex IX of the Convention with the following entry for non-hazardous wastes:

B1110 Electrical and electronic assemblies:
- Electronic assemblies consisting only of metals or alloys;
- Waste electrical and electronic assemblies or scrap[26] (including printed circuit boards) not Containing components such as accumulators and other batteries included on list A, mercury-switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors, or not contaminated with Annex I constituents (e.g., cadmium, mercury, lead, polychlorinated biphenyl) or from which these have been removed, to an extent that they do not possess any of the characteristics contained in Annex III (note the related entry on list A A1180);
- Electrical and electronic assemblies (including printed circuit boards, electronic components and wires) destined for direct re-use[27], and not for recycling or final disposal[28].

Electronic equipment will often contain hazardous components examples of which are indicated in the entry A1180 of Annex VIII. E-waste will therefore be assumed hazardous unless it can be shown that it does not contain such components and in particular[29]:

a. lead-containing glass from cathode ray tubes (CRTs) and imaging lenses, which are assigned to Annex VIII entries A1180 or A2010 “glass from cathode ray tubes and other activated glass”. This waste also belongs to category Y31 in Annex I, Lead; lead compounds and is likely to possess hazard characteristics H6.1, H11, H12 and H13 included in Annex III;
b. nickel-cadmium batteries, which are assigned to Annex VIII entry A1170 “unsorted waste batteries…”. This waste also belongs to category Y26 in Annex I, cadmium; cadmium compounds and is likely to possess hazard characteristics H6.1, H11, H12 and H13;
c. selenium drums, which are assigned to Annex VIII entry A1020 “selenium; selenium compounds”. This waste also belongs to category Y25 in Annex I, Selenium; selenium compounds and is likely to possess hazard characteristics H6.1, H11, H12 and H13;
d. printed circuit boards, which are assigned to Annex VIII entry A1180 “waste electronic and electrical assemblies……”, and entry A1020 “antimony; antimony compounds” and “beryllium; beryllium compounds”. These assemblies contain brominated compounds and antimony oxides as flame retardants, lead in solder as well as beryllium in copper alloy connectors. They also belong in Annex I, to categories Y31, lead; lead compounds, Y20, beryllium, beryllium compounds and Y27 antimony, antimony compounds and Y45, organ halogen compounds other than substances referred to elsewhere in Annex I. They are likely to possess hazard characteristics H6.1, H11, H12 and H13;
e. fluorescent tubes and backlight lamps from Liquid Crystal Displays (LCD), which contain mercury and are assigned to Annex VIII entry A1030 “mercury; mercury compounds”. This waste also belongs to category Y29 in Annex 1, Mercury; mercury compounds and is likely to possess hazard characteristics H6.1, H11, H12 and H13;
f. plastic components containing Brominated Flame Retardants (BFRs) which are assigned to Annex VIII entry A3180 “Wastes, substances and articles containing, consisting of or contaminated with polychlorinated biphenyl (PCB), polychlorinated terphenyl (PCT), polychlorinated naphthalene (PCN) or poly brominated biphenyl (PBB), or any other poly brominated analogues of these compounds, at a concentration of 50 mg/kg or more.” This waste also belongs to category Y45 in Annex I, Organo halogen compounds other than substances referred to elsewhere in Annex I, and to category Y27 Antimony, antimony compounds, and is likely to possess hazard characteristics H6.1, H11, H12 and H13;
g. other components containing or contaminated with mercury, such as mercury switches, contacts, thermometers, which are assigned to annex VIII entry A 1010/1030/1180. This waste also belongs to category Y29 in Annex 1, Mercury; mercury compounds and is likely to possess hazard characteristics H6.1, H11, H12 and H13;

[26] This entry does not include scrap from electrical power generation.
[27] Re-use can include repair, refurbishment or upgrading, but not major reassembly.
[28] In some countries these materials destined for direct re-use are not considered wastes.
[29] The following list of components or constituents are non-exhaustive examples.

h. waste oils/liquids, which are assigned to annex VIII entry A 4060 “Waste oil/water, hydrocarbons/water mixtures, emulsions”. The waste also belongs under category Y8, Y9 and is likely to possess hazardous characteristics H3, H11, H12 and H13;

i components containing asbestos, such as in wires, cooking stoves and heaters, which are assigned to annex VIII entry A 2050. The waste also belongs under category Y 36 and is likely to possess hazardous characteristic H 11.

- list A batteries,
- PCB-capacitors,
- accumulators,
- condensers (PCB concentration level of 50 mg/kg (ppm) or more),
- mercury switches,
- glass from cathode-ray tubes or other activated glass,
- toner cartridges,
- monitors, TV screen with cathode ray tubes,
- plasma screen or LCD-screen, big LCD displays;
- printer drums containing heavy metals,
- toner cartridges with dangerous compounds.

Textbox 19: *Examples of electronic hardware (or parts thereof) with hazardous components (source: Revised Correspondents’ guidelines No. 4 on WEEE).*

6 Intervention

6.0 Introduction

Article 9(5) of the Basel Convention requires that 'Each Party shall introduce appropriate national/domestic legislation to prevent and punish illegal traffic'. Reference to national legislation is essential when detaining and/or arranging the take back procedure for an illegal export/import of e-waste and/or prosecuting those responsible for the shipment.

Anyone involved in the detention and inspection of an illegal traffic of e-waste must have basic police skills such as interviewing and interrogation, surveillance and experience in the proper handling of evidence. Therefore, it is essential that investigating officers know which enforcement authorities are required to detain the shipment and to initiate the take back procedure for illegal shipments of e-waste.

If an illegal shipment of e-waste is to be taken back by the country of export, this should be undertaken with the collaboration of the Competent Authority of the Basel Convention.

6.1 Communication and collaboration in case of intervention

Communication and collaboration between the Competent Authorities in the countries of export, transit and import and their agreement at the end of the investigation phase are essential for any successful take back operation of an illegal shipment of waste and the subsequent prosecution. Without such information exchange and co-operation, the successful take back operation of an illegal shipment of e-waste will be unlikely within a short time period.

6.2 Step-by-step prosecution

6.2.1 Decision tree

The Basel Convention specifies that where a movement of waste deemed to amount to illegal traffic is the result of conduct on the part of the exporter or generator, the State of export shall ensure that the wastes in question are:

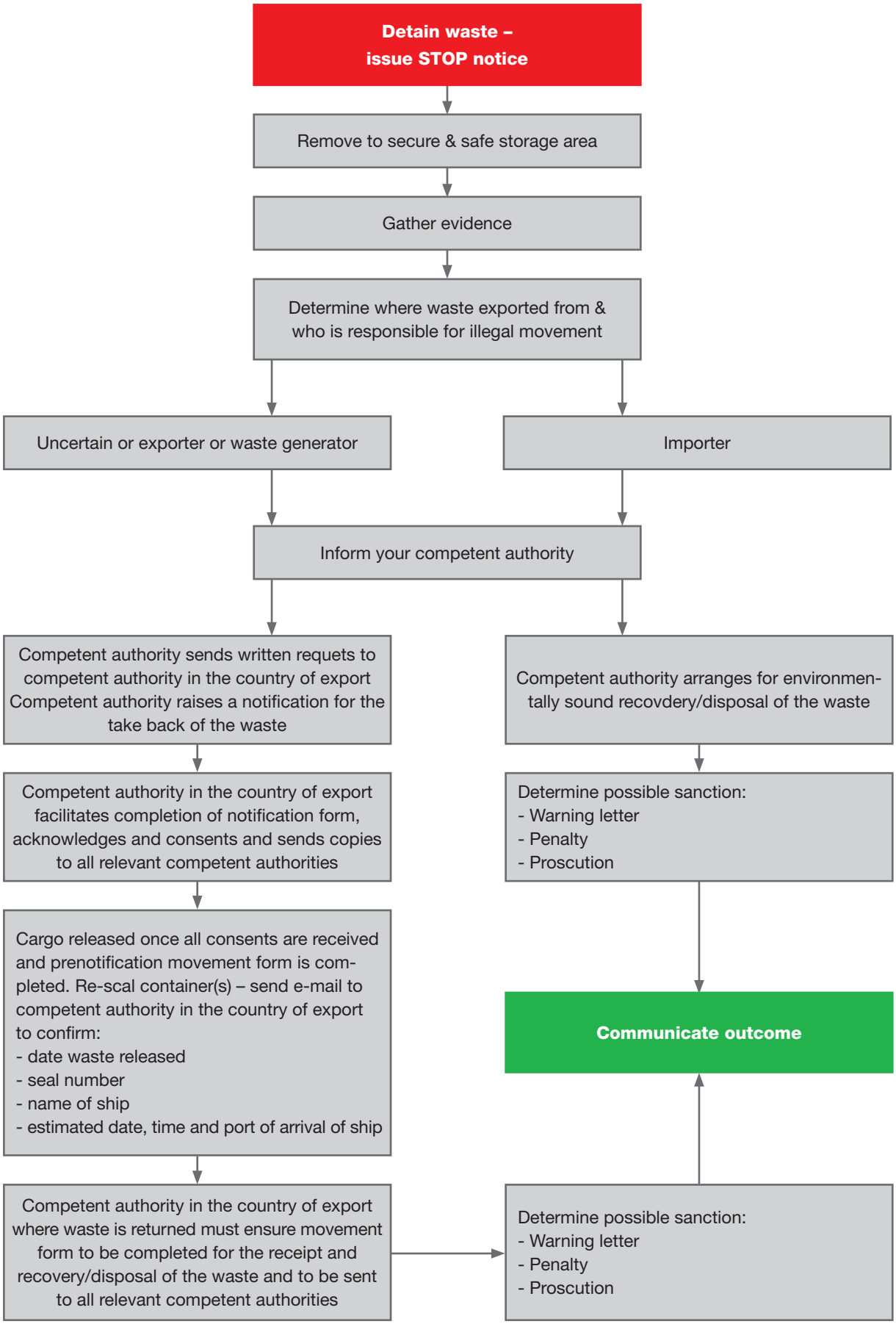
a. taken back by the exporter or the generator of waste or, if necessary, by itself into the State of export, or, if impracticable;
b. otherwise disposed of in accordance with the provisions of the Convention (ESM requirement).

The Convention also provides for the consequences of illegal traffic as a result of conduct on the part of the importer or disposer, as well as in cases where the responsibility for the illegal traffic cannot be assigned (paragraphs 2 to 5 of Article 9).

The following guidance presents steps that are followed within European Member States, which may assist enforcement officers in determining what action must be taken and what steps can be followed to enable successful prosecution, where appropriate. The following decision tree is an example of 'good practice' developed among European Member States. It identifies the steps to be followed once a waste movement has been stopped.

In the next paragraph (6.3), the different steps in this decision tree are further elaborated.

In reference to the decision tree on the next page, please note the Basel Convention does not specifically require a notification for the take back procedure. It is rather a procedure used in the EU member states.



Decision tree 5: *Step-by-step guidance after container detention (based on EU practices)*

6.3 Detention and follow-up

6.3.1 'Stop Notice'

The common practice in the EU suggests a number of steps that are proposed when a container is detained when there is a suspicion that it concerns an illegal traffic of e-waste. It is advised that the enforcement officer communicates to the shipping line and carrier of the waste that the container has been detained and the reasons why the container has been detained. For example, in England and Wales a 'stop' notice can be served to ensure that the container of an illegal shipment of e-waste is detained.

List relevant national legislation which provides the powers to raise a stop notice

STOP NOTICE

To: Company Secretary,
Address

I, [Name], being an authorised person for the purpose of the [list relevant national legislation] consider that you appear to be in control of the waste being transported from [Address & Country], to [Address & Country], namely: -

Waste Electrical and Electronic Equipment (WEEE) comprising of:
- Fridges
- Freezers
- Computer Monitors
- Computer Base units
- DVD Players
- Video Players
- Televisions
- Iron
- Kettles, and
- Other used and / or second hand electrical items

I therefore have reasonable grounds to suspect that the [list relevant national legislation] and the Basel Convention are not being, or are not likely to be, complied with.

The grounds for my suspicion are:
1. The transport of the waste from [country] to [country] is either prohibited by the Basel Convention or requires prior notification and written consent from all competent authorities concerned, in accordance with the Basel Convention.

2. The [name of enforcement authority], as [enforcement role, for example the competent authority of destination], has not given consent for any such transport.

3 Any transport, or intended transport, of the waste to [Country] in contravention of the Basel Convention, or without prior written consent from all competent authorities concerned, would be in contravention of [refer to National legislation].

The [Name of enforcement authority] DIRECTS that the waste described in this notice shall not be moved from the premises listed above until the [Name of enforcement authority] gives further notice in writing.

Date….. Signed…

Name
Job Title

NOTES:-

[List relevant national legislation which provides the powers to raise a stop notice]

General

1 This Notice is served under [refer to National legislation], on you as the person in control of waste, and prohibits the movement of waste.

2 You may wish to seek independent legal advice.

Appeal Provisions

There is no appeal mechanism against the service of this notice [or outline how they would appeal if an appeal is allowed under the relevant National Legislation].

Penalty

Failure to comply with this Notice is an offence under Regulation [refer to National legislation] and may result in legal action being taken against you.

Textbox 20: *Example of a stop notice, as used in England & Wales*

It is recommended that the container is moved to a safe and secure storage area to ensure that it cannot be moved on by the carrier or any other interested party, to ensure that the evidence is not tampered with and that the waste does not cause any damage to health or the environment.

6.3.2. Assessment of documentation

Any available paperwork such as CMR documents, safety data sheets and any documents that accompany the container or which have been provided to indicate that the items are 'goods', such as sale contracts, must be gathered and examined. The shipping line and/or shipping agent should be able to provide details of where the waste was loaded. This will assist in identifying the country of export. This information is essential for the take back procedure of an illegal shipment of waste. The shipment may have been trans-shipped on route so the last port of export may not necessarily be the country of export of the illegal shipment of e-waste.

The investigating officer should assess all documents to try to identify who is responsible for the illegal traffic – the exporter, the waste generator or the importer.

6.4 The take back procedure for an illegal shipment of waste

6.4.1 Information exchange between countries of export and import

Once the investigating officer concludes that the Illegal traffic is deemed to be as a result of the action of the exporter and/or waste generator, they should inform the Competent Authority in the country of export (and import if the waste is detained in a transit country). According to the EU practice, the officer should record sufficient evidence to enable them to confirm their initial concerns about the cargo. An inspection form, such as the example provided in Annex B1 can be used for recording this information and the possible actions form, such as the example provided in Annex B2 can be used to determine whether or not a request should be made to take back the illegal shipment of waste. The following information is recommended to be provided as a minimum (based on best practices in the EU):

- the date and precise location from the moment when the container was detained;
- name, address and contact details of the companies involved in the export (e.g. exporter, shipping agent, shipping line);
- specific details of the cargo: type, quantity, container number(s) (including why it is suspected to be waste and waste classification);
- name, address and contact details of the consignee in the country of import;
- details of intended recovery operation (if known);
- whether there are any shipping documents or photographic evidence;
- the reasons why the investigating officer believes the shipment to be illegal; and
- evidence that the Competent Authority being addressed is the country from which the waste originated.

Under Article 9 of the Basel Convention, if an illegal movement of waste is the result of conduct on the part of the exporter or generator, the exporter or the generator of waste or the state of export must take back the waste within 30 days from the time the illegal traffic has come to the attention of the State of import or such other period of time as the States concerned may agree.

6.4.2 Formal request to start the take back procedure for an illegal shipment of waste

The investigating officer or Competent Authority in the country of import should send a request to the Competent Authority in the country of export for the take back procedure of the waste and specify the date they require the waste to be taken back by (30 days from the date the Competent Authority in the country of export is informed). In the European Union this request is referred to as a "duly reasoned request". An example of such letter is given in Annex B4.

The Competent Authority of the country of export may respond requesting further information, evidence or, if the request has not come from the Competent Authority, where the waste has been detained, further information to establish if the request has been made by a legitimate organization.

6.4.3 Who organizes the take back procedure for an illegal shipment of waste?

The Competent Authority of the country of export will liaise with the exporter or waste generator to determine whether they will accept the waste to come back and whether they will organize the take back operation themselves. If not, and the illegal export is deemed to be as a result of the exporter or waste generator, then the Competent Authority in the country of export must arrange for the take back operation of the waste or the alternative recovery/disposal of the waste.

The Basel Convention does not specify how the waste should be sent back; however, within the European Union a "simplified notification process" is commonly used. This assists the Competent Authorities in monitoring the take back operation of waste and ensuring it is alternatively recovered/disposed of in an environmentally sound manner.

6.4.4 Unofficial take back of an illegal shipment of waste

In certain circumstances, an enforcement officer may decide to order a ship to take back an illegal shipment of e-waste directly to the country of export without the container being offloaded. In the European Union this is referred to as an 'unofficial take back'. In this case it is recommended that the enforcement officer follows the steps detailed above for the take back procedure, including providing a notification for the shipment that is to be taken back, even though the illegal shipment will already be on route to the country of export. This process will assist the Competent Authorities in tracking the illegal shipment of e-waste during its journey, back to where it came from.

Simplified notification process – an example of best practice (based on the EU practice)

The competent authority in the country of export will require a notification document and movement form with a unique reference number (which must contain the country code of the country where the waste has been detained, to be provided by the competent authority in the country where the waste has been detained (Annex B5 gives examples of a notification document and a movement form). The competent authority of in the country of export will liaise with the exporter/waste generator to ensure the notification package is completed. The competent authority may require specific information from the investigating officer to ensure the notification package can be completed so it is essential that close communication is maintained.

Once the notification is complete, the competent authority in the country of export will acknowledge the notification and circulate to all relevant competent authorities. The competent authorities of non-EU countries have the right to object to the return shipment transiting their country.

When the notification has been consented to by all competent authorities, the investigating officer must ensure that the container is re-sealed and that the following details are provided to the competent authority in the country of export:

- date the waste is released for return;
- the seal number on the container;
- the name of ship the container will be returned on;
- estimated date and time of arrival of ship.

The person responsible for returning the waste (whether that be the exporter/waste generator or competent authority in the country of export) must complete the movement form and inform all the relevant competent authorities three working days before the container is re-shipped. The movement form must accompany the returned waste. The competent authority for the original export must ensure that the movement form is completed when the returned waste is received at the site of return and then again when the waste is recovered/disposed of and a copy these documents sent to all the relevant competent authorities.

Please note that on the global level the Basel Convention does not require the notification in case of take back procedure!

Textbox 21: *Simplified notification process*

6.4.5 Alternative recovery/disposal in the country of import

If the investigating officer concludes that the Illegal transboundary movement of waste is deemed to be as a result of the importer and/or waste recovery or disposal site, they must inform the Competent Authority of the country of import. The Competent Authority must ensure that the waste is recovered or disposed of in an environmentally sound manner.

6.4.6 I-24/7 INTERPOL secure global communications and support system

INTERPOL facilitates assistance between law enforcement authorities through the I-24/7 secure global police communications system, which enables law enforcement in all member countries to instantly request, submit and access vital data using the Ecomessage format. Please see chapter 4.4.2 for more information.

6.4.7 Continuity of evidence

It is critical that the chain of events regarding an illegal traffic of e-waste can be accounted for and that there is continuity of evidence. If the continuity of evidence cannot be demonstrated then this may compromise the outcome of any enforcement action. For example, the exporter may claim that the items that were taken back were not the items exported or that the items were in working order prior to export and that the enforcement officers who detained the shipment have damaged the items.

Specific details that must be recorded to ensure the continuity of evidence include making a note of:

- The seal number (photograph before removal if possible) as this demonstrates that the contents have not been tampered with en route;
- Who opened the container;
- What was seen when the container was opened (including photographic evidence);
- Whether the container was unloaded and if so, what was seen (including photographic evidence);
- Details of how the waste was stored after unloading and during testing;
- Who reloaded the container (including photographic evidence) and whether an additional container was used (when a container is unloaded, it is likely that not all the waste will fit back into the container so an additional container may be required); and
- Who re-sealed the container and the number of the new seal (including photographic evidence).

It is essential to also account for any other point in time when the container has been opened prior to its detention, for example when the waste has been delivered to the importer or another party, who then opened and rejected it. In these situations, written details must be obtained from the relevant individuals at the site where the container was opened detailing:

- Who has opened the container;
- What was seen when the container was opened;
- Why the items were rejected and what action / who was informed;
- Details of any authorities who were informed and/or inspected the container;
- Who reloaded the container; and
- Who re-sealed the container.

It is strongly advised that the above details which provide the continuity of evidence are recorded by the enforcement officer in a written summary. The details and accompanying evidence (such as photographs) may then be sent to the Competent Authority, responsible for taking any enforcement action. Contact details of the enforcement officer who was responsible for the detention of the waste and any enforcement officer who has provided evidence should also be included so that they can be contacted in the event of a prosecution.

Remember to photograph the seal number of any returned container to demonstrate that the seal has not been tampered with en route.

6.4.8 Financial Responsibility

The Basel Convention states that where an illegal shipment is as a result of the conduct of the waste exporter or waste generator, the country of export must ensure that the waste is:

- taken back to its place of origin, by the exporter or generator, or
- taken back to its country of export, by the Competent Authority in the country of export or, if impracticable,
- otherwise disposed if in accordance with the provisions of the Basel Convention.

The following costs should be charged to the person responsible for exporting the waste or the waste generator:

- the cost of the take back procedure of the illegal shipment of waste;
- storage costs incurred from the date the Competent Authority in the country of export is informed that the shipment is illegal;
- the cost of the recovery or disposal of the waste upon its arrival in the country of export.

If the costs cannot be passed to the waste exporter or waste generator, then the Competent Authority in the country of export will be required to pay these costs. Experience has shown (see example below), that shipping agents and shipping lines can be encouraged to cover some of these costs, such as the costs of the take back procedure. Containers are a valuable commodity and shipping agents will want to avoid costs incurred when an illegal shipment is detained by customs. This can reduce the financial burden on a Competent Authority when the exporters of the waste or waste generators are unable to take back the waste, for example, where the exporter is a 'waste tourist' and does not reside in the country of export, where the waste exporter cannot be identified or where the exporter has gone bankrupt.

6.4.9 Responsibility for environmentally sound recovery or disposal

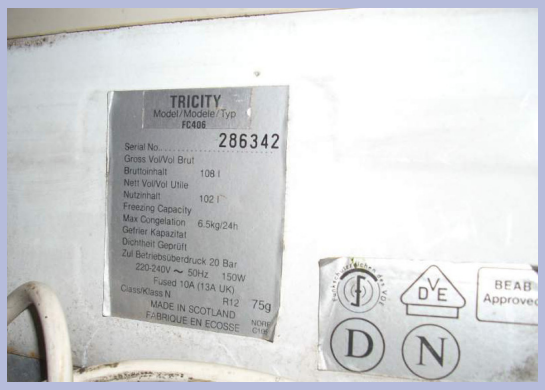
Where an illegal shipment is as a result of the conduct of the importer or the site to which the waste is to be imported, the country of import must ensure that the waste is recovered or disposed of in an environmentally sound manner by the importer or disposer or by the Competent Authority in the country of import. This would include any costs arising from storage, transport and the alternative recovery or disposal of the waste.

If the responsibility for the illegal shipment cannot be assigned to the exporter, waste generator, importer or site of recovery or disposal then the Competent Authorities must co-operate to ensure the waste is recovered/disposed of in an environmental sound manner and that storage transport and recovery/disposal costs are paid.

Example of the export of end-of-life refrigerators from the UK to Ghana, detained in Belgium and successfully prosecuted in the UK

In June 2009, during a routine inspection, the Federal Environmental Inspectorate (FLI), Belgium, detained a container of refrigerators and freezers that was on route from the UK to Ghana. The sales invoice indicated that the refrigerators and freezers had been tested and were labelled as working equipment.

Several refrigerators were tested and found to be not in a working condition. A number of other refrigerators had had their wires cut so that they could not be tested to see if they were working.



The Belgian FLI identified this shipment as an illegal traffic. The Environment Agency agreed with the Belgian FLI that this was an illegal shipment and that the waste must be returned to the UK.

The Environment Agency contacted the operator of the site identified on the sales invoice in order to:

- inform them that the container had been detained;
- explain why it was regarded as an illegal traffic of waste;
- provide the contact details of the Inspectorate in Belgium;
- request that they arrange the take back procedure for the waste; and
- provide a uniquely numbered notification for the return of the waste.

The Environment Agency worked closely with shipping agent and the Competent Authority in Belgium to ensure that the waste was taken back to England. The waste was returned by September 2009 to a designated site in the UK. After further investigation of the waste, the waste was sent to an authorised facility to be recovered and disposed.

In February 2011, the case was heard in a Magistrates court in the UK. Following the conviction, the person responsible for the illegal shipment was sentenced to serve 280 hours of unpaid work and given a six months curfew order.

Textbox 22: *Example of successful enforcement collaboration*

6.5 Prosecution

6.5.1 Prosecution requires national legislation

When a suspected illegal shipment of e-waste is detected, offences may have been committed under the provisions of national legislation implementing Article 9(5) of the Basel Convention. Where there is sufficient evidence available, the enforcement authority should bring a prosecution against the person responsible for the illegal traffic.

If a conviction is obtained against the person responsible for the illegal traffic, the relevant criminal court will impose an appropriate sentence in accordance with the applicable national legislation. This could include a fine, custodial sentence, unpaid work requirement, confiscation of assets, disqualification as a company director or other criminal sanctions.

Depending on provisions of the national legislation in the countries concerned, it may also be possible for the enforcement authority to impose civil sanctions or administrative monetary penalties against the persons responsible.

It is recognised that at the time of writing this manual, some developing countries do not have the appropriate national legislation to implement the Basel Convention. The Member States of the European Union on the other hand have adopted the national legislation that imposes the offences and penalties for illegal traffic of waste. An example of this is the UK Transfrontier Shipment (TFS) Regulations 2007.

Extracts from the UK TFS Regulations 2007

52.(1) A person on whom a notice is served under these Regulations commits an offence if he fails to comply with the provisions of that notice.

(2) Such a notice must be complied with at the expense of the person on whom it is served and, if it is not complied with, the competent authority may arrange for it to be complied with at the expense of that person.

(3) A competent authority may enforce compliance with a notice by way of an injunction or, in Scotland, by way of an order under section 45(b) of the Court of Session Act 1988(b).

Enforcement powers

51. Schedule 5 (enforcement powers) has effect.

SCHEDULE 5 - Regulation 51 - Enforcement powers
PART 1 - Powers of authorised persons

Information notice

2. An authorised person may, by notice served on any person, require that person to provide such information as is specified in the notice in such form and within such period following service of the notice or at such time as is so specified.

Enforcement and prohibition notices

3. (1) An authorised person may serve a notice on any person who contravenes or who the authorised person has reasonable grounds to suspect may contravene these Regulations or the Community Regulation—

(a) requiring him to act in accordance with the Regulations or the Community Regulation (in this Schedule referred to as an "enforcement notice"); or

(b) prohibiting him from acting in breach of them (in this Schedule referred to as a "prohibition notice").

(2) The notice must give reasons for serving it and, if appropriate, specify what action must betaken and give time limits.

Extracts from the UK TFS Regulations 2007 (continued)

Appeals against enforcement and prohibition notices

4. (1) Any person who is aggrieved by an enforcement or prohibition notice may appeal to a magistrates' court or, in Scotland, to the sheriff.
   (2) The procedure on an appeal to a magistrates' court is by way of complaint, and the Magistrates' Courts Act 1980 or, in the case of Northern Ireland, the Magistrates' Court (Northern Ireland) Order 1981 applies to the proceedings.
   (3) An appeal to the sheriff is by summary application.
   (4) The period within which an appeal may be brought is 28 days or, in the case of an enforcement notice, the period specified in the notice, whichever ends earlier.
   (5) An enforcement or prohibition notice must state—
      (a) the right of appeal to a magistrates' court or the sheriff;
      (b) the period in which such an appeal may be brought.

Powers to seize waste

5. (1) This paragraph applies if an authorised person has reasonable grounds to suspect that—
      (a) the provisions of the Community Regulation or these Regulations are not being, have not been or are not likely to be complied with in respect of any waste; or
      (b) the shipment, recovery or disposal of any waste cannot be completed in accordance with the notification and movement documents or the contract between the notifier and consignee.
   (2) The authorised person may do any of the following—
      (a) seize that waste;
      (b) serve a notice on any person who appears to him to be in control of such waste—
      (I) requiring that person to send the waste to any place specified in the notice; or
      (II) prohibiting or restricting the movement of that waste.
   (3) In this paragraph any reference to waste includes—
      (a) any thing that the authorised person has reasonable grounds to suspect is waste; and
      (b) the container in which the waste or thing is carried.

Textbox 23: *UK TFS Regulations*

6.5.2 The criminal investigation process

In general, the investigation of illegal e-waste traffic and any subsequent prosecution follows these basic steps:

- Gathering evidence (e.g. taking samples of the waste, taking pictures, making copies of all available movement documents, questioning persons and companies involved) and keeping a complete record of the investigation and evidence;
- Considering the evidence by a prosecutor and, if appropriate, bringing a prosecution;
- Where the prosecution results in a conviction, the court will impose an appropriate sentence, taking into account the financial circumstances of the offender and any relevant aggravating or mitigating factors.

Prosecutors must be consulted in the early stage of an investigation.

In order to obtain a conviction, the prosecutor must be able to demonstrate, to the necessary standard of proof, that the e-waste that was detained and/or taken back to its place of origin is the same e-waste that was shipped by the company(-ies) being prosecuted. Photographs and witness statements will help to establish the continuity of evidence, as detailed in sub-section 6.4.7 above. If there is no continuity of evidence, the person being pro-

secuted may try to claim that the items were shipped in working order but were damaged by the enforcement authorities when the items were unloaded or that waste was mixed in when the items were taken back.

It is essential that containers are re-sealed with unique reference codes and when a container is taken back, that the seal is photographed prior to export and matched and re-photographed when the container is opened upon its arrival in the original country of export.

Where evidence is gathered to show that the e-waste is hazardous (e.g. a waste refrigerator containing CFC gas or a end-of-life television set containing the CRT), this can also be put before the court where the alleged offence relates to hazardous waste, or for the purposes of sentencing in the event of a conviction.

In most instances of illegal transboundary movements of e-waste, it will be a prosecutor in the country of export who will need to determine whether there is enough evidence to make a prosecution. The investigating officer in developing countries may be required to provide a witness statement outlining their involvement in identifying, detaining and taking back an illegal shipment of e-waste.

However, in circumstances where the importer is responsible for the illegal traffic of waste, it will be a prosecutor in the country of import who will need to determine whether there is enough evidence to take a prosecution. In such circumstances, the investigating officer may need to obtain evidence and/or witness statements from the Competent Authority in the country of export to ensure continuity of evidence.

E-waste Inspection and Enforcement Manual

- Annexes -

Developed in the framework of the

SBC E-waste Africa project

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ANNEX A1: Waste classification codes for e-waste[30]

The classification of e-waste

Basel Convention codes:

A-codes for hazardous waste:

A1160: Waste lead-acid batteries, whole or crushed;

A1170: Unsorted waste batteries excluding mixtures of only list B batteries. Waste batteries not specified on list B containing Annex I constituents to an extent to render them hazardous;

A1180: Waste electrical and electronic assemblies or scrap containing components such as accumulators and other batteries included on list A, mercury-switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors, or contaminated with Annex I constituents (e.g., cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they possess any of the characteristics contained in Annex III (note the related entry on list B: B1110);

A1190: Waste metal cables coated or insulated with plastics containing or contaminated with coal tar, PCB, lead, cadmium, other organohalogen compounds or other Annex I constituents to an extent that they exhibit Annex III characteristics;

A2010: Glass waste from cathode-ray tubes and other activated glasses;

A3180: Wastes, substances and articles containing, consisting of or contaminated with polychlorinated biphenyl (PCB), polychlorinated terphenyl (PCT), polychlorinated naphthalene (PCN) or polybrominated biphenyl (PBB), or any other polybrominated analogues of these compounds, at a concentration level of 50 mg/kg or more.

B-codes for non-hazardous waste:

B1110: Electrical and electronic assemblies:

- Electronic assemblies consisting only of metals or alloys;
- Waste electrical and electronic assemblies or scrap (including printed circuit boards, not including scrap from electrical power generation) not containing components such as accumulators and other batteries included on list A, mercury-switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors, or not contaminated with Annex I constituents (e.g. cadmium, mercury, lead, polychlorinated biphenyl) or from which these have been removed, to an extent that they do not possess any of the characteristics contained in Annex III (note the related entry A1180);
- Electrical and electronic assemblies (including printed circuit boards, electronic components and wires) destined for direct re-use and not for recycling or final disposal;

B1115: Waste metal cables coated or insulated with plastics, not included in list A1190, excluding those destined for Annex IVA operations or any other disposal operations involving, at any stage, uncontrolled thermal processes, such as open-burning.

OECD codes:

GC010 Electrical assemblies consisting only of metals or alloys;

GC020 Electronic scrap (e.g. printed circuit boards, electronic components, wire, etc.) and reclaimed electronic components suitable for base and precious metal recovery;

[30] *This list has been compiled for the purpose of this manual.*

European Waste Codes (EWC)

The European list of Waste Codes contains all types of waste; both hazardous and non-hazardous. In the legislative text any waste marked with an asterisk (*) is considered as a hazardous waste pursuant to Article 1(4), first indent, of Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.

16 02	*Wastes from electrical and electronic equipment*
160209*	transformers and capacitors containing PCBs;
160210*	discarded equipment containing or contaminated by PCBs other than those mentioned in 160209;
160211*	discarded equipment containing chlorofluorocarbons, HCFC, HFC;
160212*	discarded equipment containing free asbestos;
160213*	discarded equipment containing hazardous components other than those mentioned in 160209 to 160212;
160214	discarded equipment other than those mentioned in 160209 to 160213.
1606	*Batteries and accumulators*
160601*	lead batteries;
160602*	Ni-Cd batteries;
160603*	mercury-containing batteries;
160604	alkaline batteries (except 16 06 03);
160605	other batteries and accumulators;
160606*	separately collected electrolyte from batteries and accumulators.
20 01	*Separately collected fractions*
200121*	fluorescent tubes and other mercury-containing waste;
200123*	discarded equipment containing chlorofluorocarbons;
200133*	batteries and accumulators included in 160601, 160602 or 160603 and unsorted batteries and accumulators containing these batteries;
200134	batteries and accumulators other than those mentioned in 200123;
200135*	discarded electrical and electronic equipment other than those mentioned in 200121 and 200123 containing hazardous components;
200136	discarded electrical and electronic equipment other than those mentioned in 200121, 200123 and 200135.

ANNEX A2: IMPEL Waste(s) Watch[31, 32] – e-waste sections (extract)

Introduction

This annex, which deals with the classification of e-waste streams, contains an extract of the Waste(s) Watch, version November 2011. This Waste Identification tool is developed by European Union Network IMPEL. It is therefore written towards the legal situation as applicable in the European Union and based on practices in the European Union. It should be noted that the content does not necessarily represent the view of the national administrations involved in IMPEL and no rights can be derived from the Waste Identification Tool.

Note: the European list of Waste Codes contains all types of waste; both hazardous and non-hazardous. In the legislative text any waste marked with an asterisk (*) is considered as a hazardous waste pursuant to Article 1(4), first indent, of Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.

Waste from electrical and electronic equipment (part I: OECD code GC010, non-hazardous)

Electrical assemblies consisting only of metals or alloys

Classification

Basel Convention codes: B1110 is not applicable for this waste type, as stipulated in the EU Waste Shipment Regulation (EC) Nº 1013/2006
OECD codes: GC010
EWC codes: 16 02 16, 20 01 36 (motors, compressors)
Customs Harmonised Code: 8548, Ex 85, Ex 7602, Ex 7802, Ex 7902, Ex 8002, Ex 7404, Ex 7503, Ex 7112

Physical-chemical properties: only metal e.g. electric motors without condensers, mercury switches, batteries, accumulators, LCD screens, compressors from refrigerators after proven elimination of CFCs and oils.

Clarification Waste Electrical and Electronic Equipment (part I)

General

Dismantled material is generally considered waste.Problems occur with classification of complete electrical and electronic equipment, namely with discarded TVs and computers as they can be considered product or waste.

[31] *The waste(s) watch is an enforcement tool for inspectors, developed and published by IMPEL. It gives a first indication about several waste types and the European Waste Shipment Regulation. The policy about the different waste(s) could be different in the individual member states and is subject to changes. Therefore it is always essential to consult your national waste shipment authority before taking measures. No rights can be derived from this enforcement tool. [source: page 2 of the Waste Watch].*

[32] *The information in IMPEL's waste(s) watch concerning e-waste/WEEE is for the most part based on the guidelines Nº 1, 4 and 8 as developed by and agreed upon by the Correspondents of the European Member States. See also: http://ec.europa.eu/environment/waste/shipments/guidance.htm.*

Criteria

Main criteria for distinguishing between non-hazardous (GC010, GC020) and hazardous (A1180):

- Existence or non existence of dangerous parts (see below);
- Used EEE or WEEE;
- Country of destination;
- Destination: reuse, recovery or disposal.

Points of attention

Attention should be paid to the following properties of (W)EEE and/or aspects:

- EEE or WEEE: intention or necessity to discard; completeness, damaging, packaging, production date, regular market, documents (see guideline below);
- Check for dangerous parts (batteries, PCB-capacitors, accumulators, condensers, mercury switches), glass from cathode-ray tubes or other activated glass, toner cartridges, monitors, TV screens with cathode ray tubes, plasma screens or LCD-screens, big LCD displays or printer drums containing heavy metals;
- Check for hazardousness of toner cartridges and drum-driven cartridges;
- PCBs at a concentration level of 50 mg/kg (ppm) or more is A1180;
- Recovery or disposal: EEE are not considered waste if it is sent back as defective batches for repair to the producer or repair centres (e. g. under warranty) with the intention of re-use.

Equipment would normally be considered waste if:

a) the product is not complete; essential parts are missing;
b) it shows physical damage that impairs its functionality or safety,
c) the packaging for protecting it from damage during transport and loading and unloading operations is insufficient;
d) the appearance is generally worn or damaged, thus reducing the marketability of the item(s);
e) the item has among its constituent part(s) anything that is required to be discarded or is prohibited under community or national legislation;
f) the EEE is destined for disposal or recycling instead of re-use;
g) there is no regular market for the EEE (see further indicators); or
h) it is old or outdated EEE destined for cannibalization (to gain spare parts).

Equipment would not normally be considered waste if:

a) it is fully functioning and is not destined for any of the operations listed in Annex II of the WFD (European Waste Framework Directive that lists recovery or disposal operations) and is directly reused for the purpose for which it was originally intended or presented for sale or exported for the purpose of being put back to direct reuse or sold to end consumers for such reuse, or
b) it is sent back as defective batches for repair to the producer or repair centres (e. g. under warranty) with the intention of re-use.

This could be checked by the provision of a declaration by the shipper, evidence of evaluation/testing and evidence of sufficient packaging.

Waste from Electrical and Electronic Equipment (part II: GC020 non hazardous)

Electronic scrap (e.g. printed circuit boards, electronic components, wire, etc.) and reclaimed electronic components suitable for base and precious metal recovery.

Classification

Basel Convention codes: B1110 (is not applicable[33]; see general clarification)
OECD codes: GC020 (applicable instead of Basel Convention code)
EWC codes: 16 02 14, 16 02 16, 20 01 36
Customs Harmonised Code: 8548, Ex 85, Ex 7602, Ex 7802, Ex 7902, Ex 8002, Ex 7404, Ex 7503, Ex 7112

Physical-chemical properties: electronic hardware (including white goods), or parts of equipment and corresponding shredded material if pre-treated according to state of technology. Metal parts are often packaged in plastics covering.
Colour: various.

Note: Depending on the composition, WEEE is either non-hazardous waste or hazardous waste; furthermore, it is important to distinguish between waste and second hand products!

To be classified as GC020 equipment has to be stripped of all dangerous parts such as monitors, batteries, accumulators, condensers, monitors, etc.

Waste cartridges can be classified as GC020 based on safety data sheets or product information sheets; drum-driven cartridges may be assigned to GC020 if their drums concern organic photo-conductive (OPC) drums or drums with a scratch-resistant amorphous silicon layer or zinc oxide coating.

Plastic housings can contain considerable amounts of PBB (polybrominated biphenyl)

Clarification Waste Electrical and Electronic Equipment (part II)

Cartridges (non-hazardous)
Waste cartridges can be classified as GC020 (non-hazardous) if:

- the safety data sheets or product information sheets show non-hazardous composition of the relevant toners or printing inks;
- they aredrum-driven cartridges that contain organic photo-conductive (OPC) drums or drums with a scratch-resistant amorphous silicon layer or zinc oxide coating.

[33] *If scrap does not contain components such as accumulators and other batteries included on list A, mercury- switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors, or is not contaminated with Annex I constituents (e.g., cadmium, mercury, lead, polychlorinated biphenyl) or from which these have been removed, to an extent that they do not possess any of the characteristics contained in Annex III (note the related entry on list A A1180).*

Waste from Electrical and Electronic Equipment (part III: A1180 hazardous)

Discarded (electrical and electronic) equipment or electronic assemblies and scrap containing hazardous components;

Classification

Basel Convention codes: A1180
OECD codes: GC010 and GC020 (see clarification)
EWC codes: 16 02 10*(PCB), 16 02 11*(HCFC, HFC), 16 02 12*(asbestos), 16 02 13*(other hazardous compounds), 16 02 15*(removed hazardous components), 20 01 21*(fluorescent tubes and other mercury-containing waste), 20 01 35*(other)

Customs Harmonised Code: 8548, Ex 8471, Ex 8473, Ex 8528, Ex 8529

Physical-chemical properties: electrical and electronic equipment or parts thereof with dangerous components
Colour: various; typical screens of TV and computers can easily be identified.

Note:
- Complete equipment should be considered as either non-listed or as A1180.
- Electrical and electronic assemblies destined for direct re-use are not A1180.

Clarification Waste Electrical and Electronic Equipment (part III)

Code A1180
According to annex IV part 1 note c of the WSR the entry A1180 does not apply and OECD entries GC010, GC020 apply instead when appropriate.

The WSR correspondents agreed that the words “instead when appropriate” apply to the whole first phrase of note (c) in Part I of Annex IV meaning that any of the entries A1180, GC010, GC020 may apply when appropriate.

It was also agreed that hazardous WEEE according to the European list of should, for the purposes of Regulation (EC) No 1013/2006, be classified as hazardous WEEE by using the Basel entry A1180, unless another entry contained in Annex IV applies, and that hazardous WEEE cannot be classified appropriately as either GC010 or GC020. Non-hazardous WEEE may be classified by using OECD entries GC010 or GC020. In some cases, hazardous and non-hazardous WEEE may not be listed in Annexes III, IIIA, IIIB, IV or IVA of Regulation (EC) No 1013/2006.

Cartridges (hazardous)

Waste cartridges should be classified under Basel Convention code A1180 or another entry of Annex IV of the European Waste Shipment Regulation if they or their photo-conductive drums contain hazardous materials (e.g. cadmium sulphide, selenium-arsenic).

Examples of electronic hardware (or parts thereof) with dangerous components:

- list A batteries,
- PCB-capacitors,
- accumulators,
- condensers (PCB concentration level of 50 mg/kg (ppm) or more),
- mercury switches,
- glass from cathode-ray tubes or other activated glass,
- toner cartridges,
- monitors, TV screen with cathode ray tubes,
- plasma screen or LCD-screen, big LCD displays;
- printer drums containing heavy metals,
- toner cartridges with dangerous compounds

CFC and halon containing waste

Chlorofluorocarbons (CFC) and halons

Classification

Basel Convention code: not applicable in general; OECD code: AC150, AC160 (halons)
EWC codes: 14 06 01*, 16 02 11*, 20 01 23*, 16 05 04*(halons)
Customs Harmonised Code: Ex 2903

Physical-chemical properties CFCs: gas or liquids (gas under pressure). Highly volatile.
Colours: Colourless, sweet and cloying.

Physical-chemical properties Halons: gaseous.
Colours: Colourless.

Major uses

CFC: Used in old refrigerators, but also in propellants, cars and other applications.
Halons: are mostly used in fire extinguishing media but are banned in the EU.
Note: Even if declared as product export of CFC (e.g. R12, R13, R22, R502) containing articles/materials is prohibited (EU regulation 2037/2000[34] Article 11).

Clarification for CFC-containing waste

General

The halo-alkenes are a group of chemical compounds, consisting of alkenes with one or more halogens linked making them a type of organic halide. The most widely known family within this group are the chlorofluorocarbons (CFCs). As fire extinguishing agent, propellants and solvents they have or have had wide use.

CFCs being mainly responsible for ozone depletion are banned worldwide, starting with the Montreal Protocol in 1987. In 1990, diplomats met in London and voted to significantly strengthen the Montreal Protocol by calling for a complete elimination of CFCs by the year 2000. By the year 2010 CFCs should be completely eliminated from developing countries as well.

Criteria

Main criteria for distinguishing these categories are:

- Discarded equipment containing CFCs are explicitly listed as waste (16 02 11*);
- Waste refrigerators containing CFCs could be classified non listed or A 1180
- Origin: CFC containing household waste is per definition seen as waste. Professional CFC containing equipment however is not necessarily waste;
- Fit for intended use: if refrigerators do not contain CFCs and are fit for intended use they are seen as second hand good, and not as waste;
- Destination: only shipments of CFC free waste for recovery operations (e.g. metals and plastics) are allowed.

Points of attention

Based on these criteria, attention should be paid to the following properties of CFC containing waste and/or aspects:

- Radioactivity
- Origin: e.g. household or professional product;
- Age of the device and type of cooling liquid: visually/physically check the cargo!
  (a) Check a minimum of 5 devices at random,
  (b) read the superscription if any CFCs or halons are mentioned (e.g. R12, R13, R22, R502),
  (c) look at the year of production (before 1996 most extinguishing agent, propellants and solvents contain CFCs or halons) and
  (d) check for physical signs of draining;
- In case of doubts take samples of the waste to be analyzed.

[34] *Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer.*

ANNEX A3 Functionality tests

This Annex is partly derived from 'Appendix II' of the SBC Draft Technical Guidelines that form the base for chapter 5 of this manual. The Draft Technical Guidelines are still subject to change. Please see: http://www.basel.int/Implementation/TechnicalMatters/DevelopmentofTechnicalGuidelines/Ewaste/tabid/2377/Default.aspx.

It contains some examples of functionality tests for computing equipment and mobile phones. The examples are not meant to be exhaustive but illustrate procedures as they are applied by some authorities or recommended in other guidance documents of the Basel Convention. Testing procedures and protocols for other categories of used equipment still have to be developed and should be added to this appendix as they become available.

Computing equipment

Used computing equipment shows a defect that materially affects its functionality if for example it does not:

- power up;
- have a functioning motherboard;
- perform Basic Input / Output System (BIOS) or internal set-up routines or self-checks fail;
- communicate with the host;
- print/scan/copy a test page or the page is not identifiable or readable or is blurred or lined;
- read, write or record/burn.

Physical damage that impairs its functionality or safety, as defined in the specification, including but not limited to:

- a screen that has physical damage, such as burn marks, or is broken, cracked, heavily scratched or marked, or that materially distorts image quality;
- a signal (input) cable has been cut off or cannot be easily replaced without recourse to opening the case.

The following situations are also indications that used equipment is e-waste:

- a faulty hard disc drive and a faulty Random Access Memory (RAM) and a faulty Video Card; or
- batteries containing lead, mercury or cadmium or lithium or nickel that are unable to be charged or to hold power.

Mobile phones

The Guideline on the refurbishment of used mobile phones (MPPI, 2009 d) describe the tests to be performed as a minimum to assess if used mobile phones are suitable for re-use. This includes:

a) An "air" or "ping" test – calling a test number (which will vary from country to country and from network to network), to generate a service response, and indication of whether or not the handset is functional.
b) A "loop back" test – blowing or speaking into the handset, whilst on a call, to determine whether or not the microphone and speaker are functional.
c) A screen and keypad test – switching the handset on and pressing each of the keys, to indicate whether or not the LCD and keys are functional.
d) A battery test – testing the battery with a volt meter to indicate whether or not the battery is functional.

ANNEX A3 - cont'd Functionality tests[35]

Computing Equipment	Functionality Tests	Test results
Central Processing Units (CPUs), including Desk Top PCs	**Power on self test (POST)** Switching on the computer and successfully completing the boot up process. This will confirm that the principal hardware is working, including power supply and hard drive. - A working monitor would need to be used if none present - Ensure that cooling fans are functioning	**Computer** should boot up successfully. **Computer** should respond to keyboard and mouse input. **Cooling fans** should operate normally.
Laptops/notebooks	**Power on self test (POST)** Switching on the laptop and successfully completing the boot up process. This will confirm that the principal hardware is working, including power supply and hard drive. - Test screen - Test battery functionality - Ensure the display is fully functional - Ensure cooling fan(s) is functional	**Laptop** should boot up successfully. **Laptop** should respond to keyboard and mouse input. **Display** turns on during boot up. Image should be clear and colours contrast and brightness correct with no screen burned images, scratches or cracks (see also below for display devices). **Laptop Battery** able to retain a minimum of 1 hour[36] of run time; or battery tested to determine the Full Charge Capacity in watt-hours also with a minimum of 1 hour remaining
Keyboards	Connect to computer and ensure they successfully interface. Test keys for functionality.	Computer should respond to **keyboard** input. **Keyboard** should have no missing or non functioning keys.
Mice	Assess mouse casing, cable and parts. Plug into computer or laptop to assess functionality.	**Mouse** should have all parts present (e.g., the roller ball). Computer should respond to **mouse** input. Visible cursor on screen should not judder.
Cables and power cords	Assess cable insulation and inspect plugs.	**Cabling and plugs** should be complete and free of damage, e.g., has no cracked insulation
Display devices	Plug in display and test the picture quality for pixels, colour, contrast and brightness. Software based diagnostic testing for display devices are readily available on line[37], and should be used Visual inspection for screen burn (CRTs) or "image persistence" (flat screens), scratches or other damage to screen or housing. Cabling should be inspected and present.	**Display devices** The picture should not be fuzzy, or have damaged pixels, or be too dark. LCD backlights should all function. Colours, brightness, hue and straightness of lines should be considered. The software diagnostic test should be positive. Cabling should free from damage.
Laser and inkjet printers	A test page can be successfully printed. This can be standalone but also from a computer or local area network to assess connectivity. For inkjet printers, check that the ink heads are not clogged with dry ink.	**Printers** should successfully print a test page and not jam, or produce smudged or incomplete copy.
Components (removed from equipment) including mother boards, other circuit boards, sound cards, graphics cards, hard drives, power supplies and cords/cables	Components should be tested for functionality before removal from the host computer or laptop, or by insertion in a test bench computer using diagnostic software, or a known working device as applicable.	**Components** should be fully functional **Power supplies and cords / cables should** be complete and free of damage, e.g., has no cracked insulation.

[35] *Source: Table 1, Guideline on Environmentally Sound Testing, Refurbishment, and Repair of Used Computing Equipment, PACE, 2011.*
[36] *1 hour is a minimum charge a battery should hold, although some users of laptops may request more useable runtime. It should be noted that some end users will also be able to make use of batteries with less capacity, for example a battery able to hold 40 minutes capacity need not be discarded, and can have use for those principally connecting the laptop to a reliable electricity supply using the charger, however, for the purposes of this guideline and for export, batteries must hold at least a one hour charge.*
[37] *See for example: http://www.softpedia.com/progDownload/Nokia-Monitor-Test-Download-464.html*

ANNEX A4: Examination scheme for certain types of UEEE or e-waste[38]

	1. Working condition / Ability to be repaired	2. Reuse in the importing country	3. Qualified packaging	4. Condition[39]
Red	Confirmation concerning function or the ability of repair is not available.	Declaration concerning reuse in the importer's country is not available upon request by the authority.	Items are stowed in bulk.	Items with extensive damage (e.g. broken screen glass or cut cable), Items where basic functions fail, such as signal and sound.
			Clear visible differences between the front and rear stow with noticeable problems at container x-ray examination.	
	Exporter does not have the technical facilities which allows the items to be checked.		Unprotected screen glass on floor or container wall.	Items with clearly visible signs of an outside storage (e.g., water stains, mud tracks).
Yellow	Explanation about the origin of the items without information of their functional capability.	Submission of an invoice that does not refer specifically to re-use.	Items are packed with things like old clothes, mattresses or similar as a protective material "wedged".	Broken cases.
Green	Details of necessary repair provided including information about the repair company that will be used by the importer.	Evidence of bills of sale with unequivocal evidence that it relates to the inspected load and to the importer.		
	Evidence of a declaration by the importer that a functional test of the items has been carried out by him/her or by a third party in the country of dispatch.	Evidence provided by the importer about the location and/or the details of the repair that will be undertaken in the country of destination.	Palette storage foil-packed and firmly blocked or closely stacked with locking material and protective material around all single items.	
	Evidence of a declaration by the last user that the items were functional before the delivery to the exporter.	Evidence of documentation from the responsible authority in the country of destination that the import of the items are classified as a product (not waste).	Insulating material (e.g., cardboard, air cushion foil) between the single layers of the items.	Items have no visible defects.

[38] This table has been prepared by the sub-unit for the Waste Shipment Regulation of the Waste Division within the "Behörde für Stadtentwicklung und Umwelt, Hamburg, Germany. Please see also http://www.bsu-bund.de/cln_032/nn_88782/EN/Home/homepage__node.html?__nnn=true for general information about the BSU Hamburg.

[39] EEE items for repair: They are not normally waste, if they are sent as a collective consignment of defective items, to a recognised repair company in the importer's country or to the manufacturer (e.g., under warranty) with the intention of reuse. The items must be accompanied by contracts and unquestionable evidence and be suitably packaged.

ANNEX B1 - Inspection result form[40] (example)

Form can be filled in by hand, during or after the inspection (if local forms are used during the inspection)

1.1 Reference number:	
1.2 Form sent to competent authority of destination?	☐ Yes ☐ No
1.3 Form sent to competent authority of dispatch?	☐ Yes ☐ No

2.1 Date and time	- - 20 : hr.
2.2 Location (country, exact spot)	
2.3 Inspector (name + organisation)	
2.4 Scan (X-ray)	☐ Yes ☐ No

3 Involved companies	Producer ☐ / ☐ Sender	Transporter
Name:		
Address:		
City and Country		
Tel:		
Fax:		
	Receiver	Other (producer/trader/shipping agent etc.)
Name:		
Address:		
City and Country		
Tel:		
Fax:		
	Driver/captain (only if necessary)	
Name:		
Address:		
City and Country		
Place/date of birth		
Nationality		

4 Type of vehicle inspected	☐ Truck	☐ Train	☐ Ship	☐ Other
5 Type of transport	☐ Closed container ☐ Open top container ☐ Stored waste ☐ Tanker	☐ Tanker ☐ Closed trailer ☐ Curtain trailer	☐ Tankcontainer ☐ Bulk truck ☐ Other, namely	
6 Vehicle registration (country of registration)	Truck:		Trailer:	
	Ship:		Container nr.	
7 Packing of the waste (incl. amounts!)	☐ Drum (number) ☐ Box	☐ Bag (number) ☐ Pallet	☐ Bulk (number) ☐ Other, namely	

[40] *This form is based on the model form developed under the IMPEL TFS Enforcement Actions projects, for example: http://impel.eu/projects/impel-tfs-enforcement-actions-iii.*

8 TFS- documents			
Notification :	Nr.: All annex present: ☐ yes / ☐ no	Tracking form no:	3-day prior: ☐ yes / ☐ no
Non-hazard-ous waste information	Form used: Information complete:		☐ yes / ☐ no ☐ yes / ☐ no

9 Other documents		
Type of docu-ments	☐ Digital pictures ☐ Waybill ☐ Weighing slips ☐ Analysing reports ☐ List of other foreign companies ☐ CMR / terms of delivery	☐ Bill of Lading ☐ Customs documents ☐ (pro forma) invoice ☐ Safety data sheets ☐ Other:

10 Descrip-tion of waste (made by the inspector)	Waste:	EWC-code:
Declared by notifier or owner as: (add code)	☐ Non-hazardous waste ☐ Mixture unlisted	☐ Hazardous waste ☐ Not declared as waste	☐ No single entry – unlisted waste
Quantity	☐ Tons / ☐ Kg / ☐ Units/m^3		
	Transport is part of : (number) other transports.		
Physical state	☐ Liquid ☐ Solid ☐ Gaseous	☐ Powder ☐ Solid ☐ Sludge	☐ Dangerous goods (yes/no) ☐ Samples taken (yes/no) ☐ Samples analyzed (yes/no) ☐ Digital pictures
Treatment code	Recovery R	Disposal D	

11 Description of violations			
Administrative	☐ No notification, (explain, see box 8) ☐ Other		
Illegal shipment (add art. Basel Convention and national legis-lation)	☐ Yes, (provide details)		
Responsible company	☐ Producer ☐ Sender ☐ Holder	☐ Carrier/transporters ☐ Trader/Broker	☐ Driver ☐ Disposer ☐ Recipient

12 Verification information	A. Verification executed? ☐ Yes, how? ☐ by telephone ☐ by fax/email ☐ otherwise (explain) ☐ No, why not? (explain)	B. Verification request necessary? ☐ Yes ☐ what? Company of dispatch, destination, or other (explain) ☐ how? Administrative or physical (explain) ☐ No, why not? (explain)
13 Intended actions taken	(i.e., prosecution, fine, return shipment, block)	
14 Additional information		

** Please send photo and, forms to competent authorities that will execute the verification*

ANNEX B2 - Posibble actions after the control[41] (based on best EU practices)

1. Discovered by the country of transit		
CA of destination agrees with release of shipment:	☐ Name:	Signature:
CA of destination doesn't agree with release of shipment and will send a request to the CA of dispatch or will dispose of the shipment in an environmentally sound manner:	☐ Name:	Signature:

2. Illegal shipment of waste requires repatriation			
I agree with reparation:	☐ Country of dispatch ☐ Country of transit ☐ Country of destination	Name:	Signature:
I do not agree with reparation:	☐ Country of dispatch ☐ Country of transit ☐ Country of destination	Name:	Signature:

3. Responsible company is willing to return shipment voluntarily		
3.1. Country of dispatch:		
Agrees with the return:	☐ Yes	☐ No
Agrees with unofficial return procedure:	☐ Yes	☐ No
Agrees with notification procedure:	☐ Yes	☐ No
	Name:	Signature:
3.2. Country of transit:		
Agrees with the return:	☐ Yes	☐ No
Agrees with unofficial return procedure:	☐ Yes	☐ No
Agrees with notification procedure:	☐ Yes	☐ No
	Name:	Signature:
3.3. Country of destination:		
Agrees with the return:	☐ Yes	☐ No
Agrees with unofficial return procedure:	☐ Yes	☐ No
Agrees with notification procedure:	☐ Yes	☐ No
	Name:	Signature:

4. Initial competent authority of dispatch will act as a notifier		
According art.9 (2)(a) I have agreed as the initial CA of dispatch. I will make the notification.	Name:	Signature:

[41] *This form is based on the model form developed under the IMPEL TFS Enforcement Actions projects, for example: http://impel.eu/projects/impel-tfs-enforcement-actions-iii.*

ANNEX B3 - A Stop Notice[42] (based on best EU practices)

Example of a Stop Notice
[List relevant national legislation which provides the powers to raise a stop notice]

STOP NOTICE

To: Company Secretary,
Address

I, [Name], being an authorised person for the purpose of the [list relevant national legislation] consider that you appear to be in control of the waste being transported from [Address & Country], to [Address & Country], namely: -

Waste Electrical and Electronic Equipment (WEEE) comprising of:

Fridges
Freezers
Computer Monitors
Computer Base units
DVD Players
Video Players
Television sets
Iron
Kettles, and
Other used and / or second hand electrical items

I therefore have reasonable grounds to suspect that the [list relevant national legislation] and the Basel Convention are not being, or are not likely to be, complied with.

The grounds for my suspicion are:

1. The transport of the waste from [country] to [country] is either prohibited by the Basel Convention or requires prior notification and written consent from all competent authorities concerned, in accordance with the Basel Convention.

2. The [name of enforcement authority], as [enforcement role, for example the competent authority of destination], has not given consent for any such transport.

3 Any transport, or intended transport, of the waste to [Country] in contravention of the Basel Convention, or without prior written consent from all competent authorities concerned, would be in contravention of [refer to National legislation].

The [Name of enforcement authority] DIRECTS that the waste described in this notice shall not be moved from the premises listed above until the [Name of enforcement authority] gives further notice in writing.

Date….. Signed…

Name
Job Title

NOTES:-

[List relevant national legislation which provides the powers to raise a stop notice]

General

1 This Notice is served under [refer to National legislation], on you as the person in control of waste, and prohibits the movement of waste.
2 You may wish to seek independent legal advice.

Appeal Provisions

There is no appeal mechanism against the service of this notice [or outline how they would appeal if an appeal is allowed under the relevant National Legislation].

Penalty

Failure to comply with this Notice is an offence under Regulation [refer to National legislation] and may result in legal action being taken against you.

[42] *This letter has been developed by the Environment Agency for England and Wales.*

ANNEX B4 Letter to request the take back an illegal shipment[43] (based on best EU practices)

(name of the competent authority of dispatch)

Address: name of the competent authority of transit and destination

REGISTERED MAIL

Handled by:
Extension no.:

ref.nr. (date)

Request by my authority on the return of waste materials, contravention of Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

Dear Sir / Madam,

I have been informed by staff members of the competent authority of transit/destination that on [date] a consignment of waste ((in **(number)**…containers **(numbers…)** was detained in [port] / delivered to the company/storage facility of **[company name]** in **(city) (country)**. More details regarding this shipment are summarised in the annexed inspection form.

This consignment has to be considered as a (hazardous) waste **[destined for disposal][destined for recovery]**

- The waste does not meet the criteria for non-hazardous waste because…
- The waste is prohibited under the Basel Convention ban on the export of hazardous waste to non-OECD countries and this waste is destined for import into [name of non-OECD country]
- The waste is prohibited under [list national legislation and reasons why prohibited]
- The waste is non-hazardous but is prohibited for import into [name of country]
- The waste is non-hazardous but requires notification to [name of country]
- There is no applicable waste classification/this is a mixture of wastes and requires notification to [name of country].

Therefore this consignment of waste materials was transported in violation of the Basel Convention [list any other relevant legislation].

According to our information and with regard to the transport of such waste materials, [company name, address, country] is to be considered as the exporter of the waste under Article 2(15) of the Basel Convention and [company name, address, country] is considered to be the loading point of the waste prior to its export.

Request for your agreement

With reference to article 9(2) of the Basel Convention, I request your agreement that the waste materials can be returned to [country name….] by [enter date 30 days from date that competent authority where waste was detained was informed of the illegal waste shipment] or an agreed period [if prepared to extend this date].

Please indicate your agreement. Yes/No

A notification procedure will be followed. I enclose a uniquely numbered notification document / a uniquely numbered notification document will be issued upon your agreement to the return of the waste.

[43] *Based on the model letter developed under the IMPEL TFS Project 'Revision of the manual on return shipments'.*

Further information

For further information regarding the contents of this letter, please contact **[name…, e-mail address, tel. nos]**, member of my staff.

Could you please inform me of your point of view as soon as possible and keep me informed of any progress.

Thank you in advance for your cooperation in this matter.

[Yours sincerely,]

ANNEX B5 Notification document and transport document for transboundary movements / shipments of waste[44]

1. Exporter - notifier Registration No: Name: Address: Contact person: Tel: Fax: E-mail:	3. Notification No: Notification concerning: (i) Individual shipment: ☐ (ii) Multiple shipments: ☐ (i) Disposal (1): ☐ (ii) Recovery: ☐ C. Pre-consented recovery facility (2;3): Yes: ☐ No: ☐
	4. Total intended number of shipments:
	5. Total intended quantity (4): Tonnes (Mg): m^3:
2. Importer- consignee Registration No: Name: Address: Contact person: Tel: Fax: E-mail:	6. Intended period of time for shipment(s) (4): First departure: Last departure:
	7. Packaging type(s) (5): Special handling requirements (6): Yes: ☐ No: ☐
	11. Disposal /recovery operation(s) (2): D-code / R-code (5): Technology employed (6): Reason for export (1;6):
8. Intended carrier(s) Registration No: Name (7): Address: Contact person: Tel: Fax: E-mail: Means of transport (5):	12. Designation and composition of the waste (6):
9. Waste generator(s) –producer(s) (1; 7; 8) Registration No: Name: Address: Contact person: Tel: Fax: E-mail: Site and process of generation (6):	13. Physical characteristics (5):
10. Disposal facility (2): ☐ or recovery facility (2): ☐ Registration No: Name: Address: Contact person: Tel: Fax: E-mail: Actual site of disposal/recovery:	14. Waste identification (fill in relevant codes) (i) Basel Annex VIII (or IX if applicable): (ii) OECD code (if different from (i)): (iii) EC list of wastes: (iv) National code in country of export: (v) National code in country of import: (vi) Other (specify): (vii) Y-code: (viii) H-code (5): (ix) UN class (5): (x) UN Number: (xi) UN Shipping name: (xii) Customs code(s) (HS):

15. (a) Countries/States concerned (b) Code no. of competent authorities where applicable (c) Specific points of exit or entry (border crossing or port)

State of export - dispatch	State(s) of transit (entry and exit)				State of import - destination
(a)					
(b)					
(c)					

16. Customs offices of entry and/or exit and/or export (European Community):

[44] *Obligatory document under the EC (Waste Shipment) Regulation 1013/2006; http://trade.ec.europa.eu/doclib/docs/2006/october/tradoc_130521.pdf.*

Entry:	Exit:	Export:
17. Exporter's – notifier's / generator's – producer's (1) declaration: I certify that the information is complete and correct to my best knowledge. I also certify that legally enforceable written contractual obligations have been entered into and that any applicable insurance or other financial guarantee is or shall be in force covering the transboundary movement. Exporter's- notifier's name: Signature: Date: Generator's- producer's name: Signature: Date:		18. Number of annexes attached
FOR USE BY COMPETENT AUTHORITIES		
19. Acknowledgement from the relevant competent authority of countries of import – destination / transit (1) / export – dispatch (9): Country: Notification received on: Acknowledgement sent on: Name of competent authority: Stamp and/or signature:		20. Written consent (1;8) to the movement provided by the competent authority of (country): Consent given on: Consent valid from: ☐ until: ☐ Specific conditions: No: if Yes, see block 21 (6): Name of competent authority: Stamp and/or signature:
21. Specific conditions on consenting to the movement document or reasons for objecting:		
(1) Required by the Basel Convention (2) In the case of an R12/R13 or D13-D15 operation, also attach corresponding information on any subsequent R12/R13 or D13-15 facilities and on the subsequent R1-R11 or D1-D12 facilit(y)ies when required (3) To be completed for movements within the OECD area an only if B (ii) applies (4) Attach detailed list if multiple shipments		(5) See list of abbreviations and codes on the next page (6) Attach details if necessary (7) Attach list if more than one (8) If required by national legislation (9) If applicable under the OECD Decision

List of abbreviations and codes used in the Notification Document.

DISPOSAL OPERATIONS (block 11)	
D1	Deposit into or onto land (e.g., landfill, etc.)
D2	Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.)
D3	Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.)
D4	Surface impoundment (e.g. placement of liquid or sludge discards into pits, ponds or lagoons, etc.)
D5	Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.)
D6	Release into water body except seas/oceans
D7	Release into seas/oceans including sea-bed insertion
D8	Biological treatment not specified elsewhere in this list which results in final compounds or mixtures which are discarded by means of any of the operations in this list
D9	Physico-chemical treatment not specified elsewhere in this list which results in final compounds or mixtures which are discarded by means of any of the operations in this list (e.g. evaporation, drying, calcination, etc.)
D10	Incineration on land
D11	Incineration at sea
D12	Permanent storage (e.g., emplacement of containers in a mine, etc.)
D13	Blending or mixing prior to submission to any of the operations in this list
D14	Repackaging prior to submission to any of the operations in this list
D15	Storage pending any of the operations numbered in this list.

RECOVERY OPERATIONS (block 11)	
R1	Use as a fuel (other than in a direct incineration) or other means to generate energy (Basel/OECD) – Use principally as a fuel or other means to generate energy (EU)
R2	Solvent reclamation/regeneration
R3	Recycling/reclamation of organic substances which are not used as solvents
R4	Recycling/reclamation of metals and metal compounds
R5	Recycling/reclamation of other inorganic materials
R6	Regeneration of acids or bases
R7	Recovery of components used for pollution abatement
R8	Recovery of components from catalysts
R9	Used oil re-refining or other reuses of previously used oil
R10	Land treatment resulting in benefit to agriculture or ecological improvement
R11	Uses of residual materials obtained from any of the operations numbered R1-R10
R12	Exchange of wastes for submission to any of the operations numbered R1-R11
R13	Accumulation of material intended for any operation in this list

PACKAGING TYPES (block 7)
1. Drum
2. Wooden barrel
3. Jerrican
4. Box
5. Bag
6. Composite packaging
7. Pressure receptacle
8. Bulk
9. Other (specify)

MEANS OF TRANSPORT (block 8)
R = Road
T = Train/rail
S = Sea
A = Air
W = Inland waterways

PHYSICAL CHARACTERISTICS (block 13)
1. Powdery/powder
2. Solid
3. Viscous/paste
4. Sludgy
5. Liquid
6. Gaseous
7. Other (specify)

H-CODE AND UN CLASS (block 14)		
UN Class	**H-code**	**Characteristics**
1	H1	Explosive
3	H3	Flammable liquids
4.1	H4.1	Flammable solids
4.2	H4.2	Substances or wastes liable to spontaneous combustion
4.3	H4.3	Substances or wastes which, in contact with water, emit flammable gases
5.1	H5.1	Oxidizing
5.2	H5.2	Organic peroxides
6.1	H6.1	Poisonous (acute)
6.2	H6.2	Infectious substances
8	H8	Corrosives
9	H10	Liberation of toxic gases in contact with air or water
9	H11	Toxic (delayed or chronic)
9	H12	Ecotoxic
9	H13	Capable, by any means, after disposal of yielding another material, e.g., leachate, which possesses any of the characteristics listed above

ANNEX B5 Cont'd Movement document for transboundary movements / shipments of waste[45]

1. Corresponding to notification No:		2. Shipment No. / Total number of shipments: /
3. Exporter - notifier Registration No.: Name: Address: Contact person: Tel: Fax: E-mail:		4. Importer - consignee Registration No: Name: Address: Contact person: Tel: Fax: E-mail:
5. Actual quantity: Tonnes (Mg): m^3:		6. Actual date of shipment:
7. Packaging Type(s) (1): Special handling requirements: (2) Yes: ☐ No: ☐		Number of packages:
8. (a) 1st Carrier (3): Registration No: Name: Address: Tel: Fax: E-mail:	8. (b) 2nd Carrier: Registration N o: Name: Address: Tel: Fax: E-mail:	8. (c) Last Carrier: Registration No: Name: Address: Tel: Fax: E-mail:
------- To be completed by carrier's representative --------		More than 3 carriers (2): ☐
Means of transport (1): Date of transfer: Signature:	Means of transport (1): Date of transfer: Signature:	Means of transport (1): Date of transfer: Signature:
9. Waste generator(s) – producer(s) (4; 5; 6): Registration No: Name: Address: Contact person: Tel: Fax: E-mail: Site of generation (2):		12. Designation and composition of the waste (2): 13. Physical characteristics (1):
10. Disposal facility or recovery facility ☐ ☐ Registration No: Name: Address: Contact person: Tel: Fax: E-mail: Actual site of disposal/recovery (2):		14. Waste identification (fill in relevant codes) (i) Basel Annex VIII (or IX if applicable): (ii) OECD code (if different from (i)): (iii) EC list of wastes: (iv) National code in country of export: (v) National code in country of import: (vi) Other (specify): (vii) Y-code: (viii) H-code (1): (ix) UN class (1): (x) UN Number: (xi) UN Shipping name: (xii) Customs code(s) (HS):
11. Disposal /recovery operation(s) D-code / R-code (1):		
15. Exporter's – notifier's / generator's – producer's (4) declaration: I certify that the information is complete and correct to my best knowledge. I also certify that legally enforceable written contractual obligations have been entered into, that any applicable insurance or other financial guarantee is in force covering the transboundary movement and that all necessary consents have been received from the competent authorities of the countries concerned.		
Name:	Date:	Signature:

[45] *Obligatory document under the EC (Waste Shipment) Regulation 1013/2006; http://trade.ec.europa.eu/doclib/docs/2006/october/tradoc_130521.pdf.*

16. For use by any person involved in the transboundary movement in case additional information is required			
17. Shipment received by importer – consignee (if not facility):	Date:	Name:	Signature:
TO BE COMPLETED BY DISPOSAL / RECOVERY FACILITY			
18. Shipment received at disposal facility ☐ or recovery facility ☐ Date of reception: Accepted: ☐ Rejected* ☐ Quantity received: Tonnes (Mg): m^3: Approximate date of disposal/recovery: ** immediately contact competent* Disposal/recovery operation (1): authorities Name: Date: Signature:			19. I certify that the disposal/recovery of the waste described above has been completed. Name: Date: Signature and stamp:
1 See list of abbreviations and codes on the next page 2 Attach details if necessary 3 If more than 3 carriers, attach information as required in blocks 8 (a,b, c).		4 Required by the Basel Convention 5 Attach list if more than one 6 If required by national legislation	

FOR USE BY CUSTOMS OFFICES (if required by national legislation)			
20. Country of export – dispatch or customs office of exit The waste described in this movement document left the country on: Signature: Stamp:		20. Country of import – destination or customs office of entry. The waste described in this movement document entered the country on: Signature: Stamp:	
22. Stamps of customs offices of transit countries			
Name of country:		Name of country:	
Entry:	Exit:	Entry:	Exit:
Name of country:		Name of country:	
Entry:	Exit:	Entry:	Exit:

List of abbreviations and codes used in the Movement Document.

DISPOSAL OPERATIONS (block 11)		RECOVERY OPERATIONS (block 11)	
D1	Deposit into or onto land (e.g., landfill, etc.)	R1	Use as a fuel (other than in a direct incineration) or other means to generate energy (Basel/OECD) –
D2	Land treatment, (e.g., biodegradation of liquid or sludgy discards in soils, etc.)	R2	Use principally as a fuel or other means to generate energy (EU)
D3	Deep injection, (e.g., injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.)	R3	Solvent reclamation/regeneration
D4	Surface impoundment, (e.g., placement of liquid or sludge discards into pits, ponds or lagoons, etc.)	R4	Recycling /reclamation of organic substances which are not used as solvents
D5	Specially engineered landfill, (e.g., placement into lined discrete cells which are capped and isolated from one another and the environment), etc.	R5	Recycling/reclamation of metals and metal compounds
D6	Release into a water body except seas / oceans	R6	Recycling/reclamation of other inorganic materials
D7	Release into seas/oceans including sea-bed insertion	R7	Regeneration of acids or bases
D8	Biological treatment not specified elsewhere in this list which results in final compounds or mixtures which are discarded by means of any of the operations in this list	R8	Recovery of components used for pollution abatement
D9	Physico-chemical treatment not specified elsewhere in this list which results in final compounds or mixtures which are discarded by means of any of the operations in this list (e.g., evaporation, drying, calcination, etc.,)	R9	Recovery of components from catalysts
D10	Incineration on land	R10	Used oil re-refining or other reuses of previously used oil
D11	Incineration at sea	R11	Land treatment resulting in benefit to agriculture or ecological improvement
D12	Permanent storage (e.g., emplacement of containers in a mine, etc.)	R12	Uses of residual materials obtained from any of the operations numbered R1-R10
D13	Blending or mixing prior to submission to any of the operations in this list	R13	Exchange of wastes for submission to any of the operations numbered R1-R11
D14	Repackaging prior to submission to any of the operations in this list		Accumulation of material intended for any operation in this list
D15	Storage pending any of the operations in this list.		

PACKAGING TYPES (block 7)
1. Drum 2. Wooden barrel 3. Jerrican 4. Box 5. Bag 6. Composite packaging 7. Pressure receptacle 8. Bulk 9. Other (specify)

MEANS OF TRANSPORT (block 8)
R = Road T = Train/rail S = Sea A = Air W = Inland waterways

PHYSICAL CHARACTERISTICS (block 13)
1. Powdery/powder 2. Solid 3. Viscous/paste 4. Sludgy 5. Liquid 6. Gaseous 7. Other (specify)

H-CODE AND UN CLASS (block 14)		
UN Class	**H-code**	**Characteristics**
1	H1	Explosive
3	H3	Flammable liquids
4.1	H4.1	Flammable solids
4.2	H4.2	Substances or wastes liable to spontaneous combustion
4.3	H4.3	Substances or wastes which, in contact with water, emit flammable gases
5.1	H5.1	Oxidizing
5.2	H5.2	Organic peroxides
6.1	H6.1	Poisonous (acute)
6.2	H6.2	Infectious substances
8	H8	Corrosives
9	H10	Liberation of toxic gases in contact with air or water
9	H11	Toxic (delayed or chronic)
9	H12	Ecotoxic
9	H13	Capable, by any means, after disposal of yielding another material, e.g., leachate, which possesses any of the characteristics listed above

ANNEX C1 Recommendations for environmentally sound management of e-waste

General[46]:

1. There exists a regulatory infrastructure and enforcement that ensures compliance with applicable regulations;

2. Sites or facilities are authorized and of an adequate standard of technology and pollution control to deal with the hazardous wastes in the way proposed, in particular taking into account the level of technology and pollution control in the exporting country;

3. Operators of sites or facilities at which hazardous wastes are managed are required, as appropriate, to monitor the effects of those activities;

4. Appropriate action is taken in cases where monitoring gives indication that the management of hazardous wastes have resulted in unacceptable emissions;

5. Persons involved in the management of hazardous wastes are capable and adequately trained in their capacity;

Country-specific:

6. Take steps to identify and quantify the types of waste being produced nationally;

7. Use best practice to avoid or minimize the generation of hazardous waste, such as the use of clean method;

8. Provide sites or facilities authorized as environmentally sound to manage its wastes, in particular hazardous wastes;

9. In addition, enforcement and monitoring could be enhanced through international cooperation;

Facility-specific: (these are a result of the PACE initiative)[47]

10. Top Management Commitment to a Systematic Approach: Demonstrate commitment of top management to integrate a systematic approach to achieve ESM in all aspects of facility operations, which often includes an environmental health and safety management system;

11. Risk Assessment: Identify actual and/or potential hazards and risks to public and worker health and safety, and to the environment that are associated with activities, products and services;

12. Risk Prevention and Minimization: Eliminate where possible and in all cases strive to minimize actual and/or potential hazards and risks to public and worker health and safety, and the environment that are associated with activities, products and services;

13. Legal Requirements: Identify, access and strive to fulfil applicable legal requirements, including for example: legislation, statutes and regulations; decrees and directives; permits, licenses and certificates of approval, or other forms of authorization; orders issued by regulatory agencies; and/or judgments of courts or administrative tribunals. Facilities should also take into consideration customary or indigenous law and treaties, conventions and protocols;

[46] Both general and country s pecific recommendations are derived from the Basel Guidance Document on the Preparation of Technical Guidelines for the Environmentally Sound Management of Wastes Subject to the Basel Convention.

[47] For more information see Environmentally Sound Management (ESM) Criteria Recommendations prepared by the PACE Ad Interim Project Group on ESM Criteria and approved by the PACE Working Group in March 2009 and revised in March 2011. The summary of its recommendations is included in the overall Guidance Document on the Environmentally Sound Management of Used and End-of-Life Computing Equipment approved by the tenth Conference of the Parties of the Basel Convention in October 2011.

14. Awareness, Competency and Training: Ensure employees have an appropriate level of awareness, competency and training with respect to the effective management of occupational risks;

15. Record-keeping and Performance Measurement: Maintain records, monitor, track, and evaluate facility performance at achieving ESM;

16. Corrective Action: Take appropriate action to address significant actual and/or potential risks to public and worker health and safety, and the environment and correct identified deficiencies in achieving ESM;

17. Transparency and Verification: Provisions to support transparency and verification throughout each of the above building blocks, subject to appropriate protection for confidential business information, can help facilities to provide public assurances that operations and activities are compatible with ESM. Such provisions may include for example participating in third party audits and inspections.

ANNEX C2 MOU between customs and environmental authority (example)

Appendix 1 to the Framework Agreement between

[Authority X] and [Authority Y] dated [date]

Collaboration relating to legislation on waste movements

Regulations and task	
a Legislation	[List relevant legislation]
b Objective of legislation	The objective of [regulation x, y, and z] is to control transboundary movements of waste by the application of various procedures in accordance with the type of waste and its destination, including the question of whether it is to be disposed of or recovered.
c Task	The [[Customs Authorities]] supervise the import and export of waste into, through and out of the country. Inspections are carried out to see whether waste is involved and, if so, whether the provisions of [regulation x, y, and z] have been met. In the first instance, inspections focus on the documents accompanying the goods and, if necessary they can be followed up by an actual inspection of the goods. In the event of violations, the [Customs Authorities] draw up an official report. The [EPA or MoE] takes action under administrative law.
d Powers	The Decision on assignment of supervisory officials, regulations of the [EPA or MoE] stipulates that Customs officials, amongst others, are responsible for supervision of compliance with [Regulation xxx] in so far as supervision can be exercised in conjunction with the activities Customs officials are legally authorized to carry out. In exercising their duties, Customs officials make use of the powers included in xxxx (Customs Law). Customs officials' investigative powers are derived from article xxx (Offences Act).
Implementation	
a Methods of enforcement	**Specific inspections** On the basis of declarations for import, transit or export, inspections are made to see whether waste is involved and, if so, whether the provisions of [Regulation xxx] have been met. The inspections are carried out on the basis of risk signals which are jointly determined by the [EPA or MoE] and the [[Customs Authorities]] and laid down annually in the enforcement plan. If there is reason to do so, extra risks can be covered between times. **Integrated inspections** If waste is found during inspections carried out for other reasons and/or other customs regulations, compliance with [Regulation xxx] is always checked. If necessary, the goods themselves are inspected. **Monitoring actions** The [[Customs Authorities]] participate in road transport monitoring actions on request. Requests are addressed to the Customs Information Centre. **Implementation** In the first instance, inspections focus on the documents accompanying the goods and these can, if necessary, be followed up by an actual inspection of the goods. If inspection of the documents or the goods indicates that there is reason to do so, the customs official handling the case calls in the information service relating to [Regulation xxx]. The information service is the only body authorized to apply to the [EPA or MoE] for information and advice (including outside office hours). The information service can also request on-the-spot support during office hours. The procedures for the enforcement methods are laid down by the [[Customs Authorities]] in customs regulations.

b Handling non-compliance	When supervising and dealing with violations, the [Customs Authorities] work in accordance with the procedures of the [EPA or MoE]. Every violation observed is immediately reported to the [EPA or MoE]. If the [Customs Authorities] handle a violation independently, they draw up the official report themselves. Copies of the official report are sent to the Inspectorate for Housing, Spatial Planning and the Environment's National Reporting and Information Point. If the official report is extensive, the core data suffice. If necessary, the [Customs Authorities]' information service official can request advice and support from the [EPA or MoE]. Complex cases are, in principle, handed over after consultation with the [EPA or MoE] employee of the region concerned. In such cases, the information gathered and, where appropriate, an official report of the findings are provided. After a case has been transferred, the [EPA or MoE] employee informs the Customs official handling the case how it has been handled and of the final results.
c Customs laboratory	If the [Customs Authorities] decide to take samples, the [EPA or MoE] is contacted regarding the necessity of sampling and how this is to be carried out, in advance. If sampling in necessary for a case which is being handled independently by the [Customs Authorities], the analysis is carried out by the Customs laboratory. If a case is being handled in collaboration with the [EPA or MoE], sampling is carried out by or in collaboration with this organization. The [EPA or MoE] determines the best laboratory for testing the sample. If the [EPA or MoE] decides to have the sample tested by the Customs Laboratory, the [Customs Authorities] handle the actual instruction. In all other cases the [EPA or MoE] handles the instruction. Projects and actions requiring sampling and laboratory testing will, as far as possible, be carried out by the Customs laboratory.
d Enforcement plan	The [Customs Authorities] draw up an annual enforcement plan in collaboration with the [EPA or MoE]. The plan is officially established within the [Customs Authorities] by the national meeting of risk managers. The risks and the way in which they are covered within the [Customs Authorities]' processes are described in the enforcement plan on the basis of the enforcement priorities indicated by the [EPA or MoE]. The [Customs Authorities] look for and analyse risks for the purpose of this plan. This also takes place in collaboration with the [EPA or MoE]. Both parties provide data to this end.
e Priorities	The enforcement priorities are laid down annually by the [EPA or MoE] and form the point of departure for the Custom Authorities' enforcement plan. Violations and other signals are reported to the [EPA or MoE] so that, if necessary, the priorities can be adjusted. In the implementation of the priority enforcement tasks, [EPA or MoE] supports the [Customs Authorities] in bringing criminal proceedings for violations (or suspected violations) and takes responsibility for proceedings under administrative law. Regardless of the prioritization, the [EPA or MoE] is responsible for the necessary actions under administrative law if, after illegal trafficking has been observed, the waste is not voluntarily returned to the country of export in question.
f Annual plan - objective	Collaboration during the previous year is evaluated annually, in consultation, and the objective for the following year is discussed. This takes place by [date] at the latest. The evaluation of the enforcement in the previous year and the [EPA or MoE]'s enforcement priorities are taken into account here. This objective is subsequently included in the decision-making process for all the [Customs Authorities]' objectives. The [Customs Authorities] give feedback on the result to the [EPA or MoE]. The objective and the information to be provided on the results of the objective are then jointly laid down in the Custom Authorities' enforcement plan.
g Reports	The [Customs Authorities] are responsible for evaluating the enforcement laid down in the enforcement plan and for the annual report of enforcement results for the [EPA or MoE]. Criteria for the evaluation are laid down in the enforcement plan in consultation. The objective of the evaluation is, in particular, to examine whether the risks have been adequately covered. The questions are, inter alia, whether the required inspections were carried out and whether they were effective. The annual report concerning enforcement by the [Customs Authorities] in the previous year is sent to the [EPA or MoE] by [date] at the latest. In any event this includes the number of inspections for each object, violations observed, official reports drawn up and a description of trends and particulars.

Exchange of information and training	
a Exchange of information	The [Customs Authorities] - report violations observed to the [EPA or MoE]; - send copies of official reports to the [EPA or MoE]; - send a report of their environmental enforcement activities during the previous year to the [EPA or MoE] annually before [date] every year; [EPA or MoE] can also request other information from the [Customs Authorities] on an ad hoc basis. [EPA or MoE]: - informs the [Customs Authorities] of the required prioritisation for enforcement in the following calendar year in [date], if possible; - informs the [Customs Authorities] how the reported violation has been handled and of the final results; - informs the [Customs Authorities] of changes in legal stipulations, additional regulations, new policy standpoints and case law in good time; - informs the [Customs Authorities] of any changes in the enforcement policy. Information on specific waste streams required by the [EPA or MoE] in the framework of projects etc. can be obtained from the Customs Information Centre. Parties will make further agreements on the sort of information to be exchanged and how and to what extent this can take place.
b Training	The [Customs Authorities] deploy specialists, to ensure good enforcement. The specialists are trained and receive periodic refresher courses under the responsibility of the Tax Authorities/Centre for knowledge and communication, with the aid of experts from the [EPA or MoE].
c Helpdesk function	The information service officials fulfil the primary helpdesk function for their colleagues within the [Customs Authorities]. The helpdesk function regarding the rules and the application of [Regulation xxx] is fulfilled by the [EPA or MoE]. Any questions the [Customs Authorities] may have are submitted via the information service official.

Consultation	
a Consultation	Consultation takes place at least once a year between the [EPA or MoE] and the [Customs Authorities] on the enforcement and functioning of the collaboration in accordance with this appendix and the enforcement plan.
b Contacts	On behalf of the [EPA or MoE]. On behalf of the [Customs Authorities]: The Customs Information Centre, covenant management and risk control non-fiscal tasks of the [Customs Authorities].

[Organization] [Title]	[Organization] [Title]
[Signature]	[Signature]

ANNEX C3 - Bill of Lading – B/L (example)

Date	Bill of Lading – Short Form – Not Negotiable
Ship From	Bill of Lading Number:
[Name] [Street Address] [City, ST ZIP Code] SID No.:	Bar Code Space
Ship To	Carrier Name:
[Name] [Street Address] [City, ST ZIP Code] CID No.: number(s):	Trailer number: Serial
Third Party Freight Charges Bill to	SCAC:
[Name] [Street Address] [City, ST ZIP Code]	Pro Number: Bar Code Space
Special Instructions:	Freight Charge Terms (Freight charges are prepaid unless marked otherwise): Prepaid ☐ Collect ☐ 3rd Party ☐
	☐ Master bill of lading with attached underlying bills of lading.

Customer Order Information						
Customer Order No.	# of Pack-ages	Weight	Pallet/Slip (circle one)		Additional Shipper Information	
			Y	N		
			Y	N		
			Y	N		
			Y	N		
Grand Total						

Carrier Information								
Handling Unit		Package					LTL Only	
Qty	Type	Qty	Type	Weight	HM (X)	Commodity Description Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of NMFC item 360	NMFC No.	Class

Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property as follows: "The agreed or declared value of the property is specifically stated by the shipper to be not exceeding _____ per _____.	COD Amount: $ Fee terms: Collect ☐ Prepaid ☐ Customer check acceptable ☐

<table>
<tr><td colspan="4">Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 USC § 14706(c)(1)(A) and (B).</td></tr>
<tr><td colspan="2">Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper, on request, and to all applicable state and federal regulations.</td><td colspan="2">The carrier shall not make delivery of this shipment without payment of charges and all other lawful fees.

Shipper Signature:</td></tr>
<tr><td>Shipper Signature/Date:

This is to certify that the above named materials are properly classified, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the DOT.</td><td>Trailer Loaded:
☐ By shipper
☐ By driver</td><td>Freight Counted:
☐ By shipper
☐ By driver/ pallets said to contain
☐ By driver/ pieces</td><td>Carrier Signature/Pickup Date:

Carrier acknowledges receipt of packages and required placards. Carrier certifies emergency response information was made available and/ or carrier has the DOT emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in good order, except as noted.</td></tr>
</table>

ANNEX C4 Invoice (example)

We Do Export Goods Ltd.

Manchester House, 22 Coronation Street, Salford, SA22 1DW

Company Nos. 9876543

Tel: 1234 5678910

12/12/2011

INVOICE

Invoice number: 12345

Customer Information:

Billing Address		Shipping Address	
Company:	Electricals For You	**Company:**	Resale Electricals
Name:	Adam Smith	**Name:**	
Address:	12 Kings Court	**Address:**	
	London Road		
	Birmingham		Tema Ghana
Postcode:	BM22 5RX	**Postcode**	

Order information:

Quantity	Product Description	Amount Each	Amount
20	TVs		
5	Microwaves		
10	Toasters		
12	VCRs		
15	Kettles		
		Subtotal:	
		Tax:	
		Shipping:	
		Grand Total:	£2,000

Notes:
Full functionality testing documents to accompany the container.

ANNEX C5 Explanation of "Incoterms 2010"

The International Chamber of Commerce (ICC) has introduced new rules for the use of domestic and international trade terms, which entered into effect on 1 January 2011

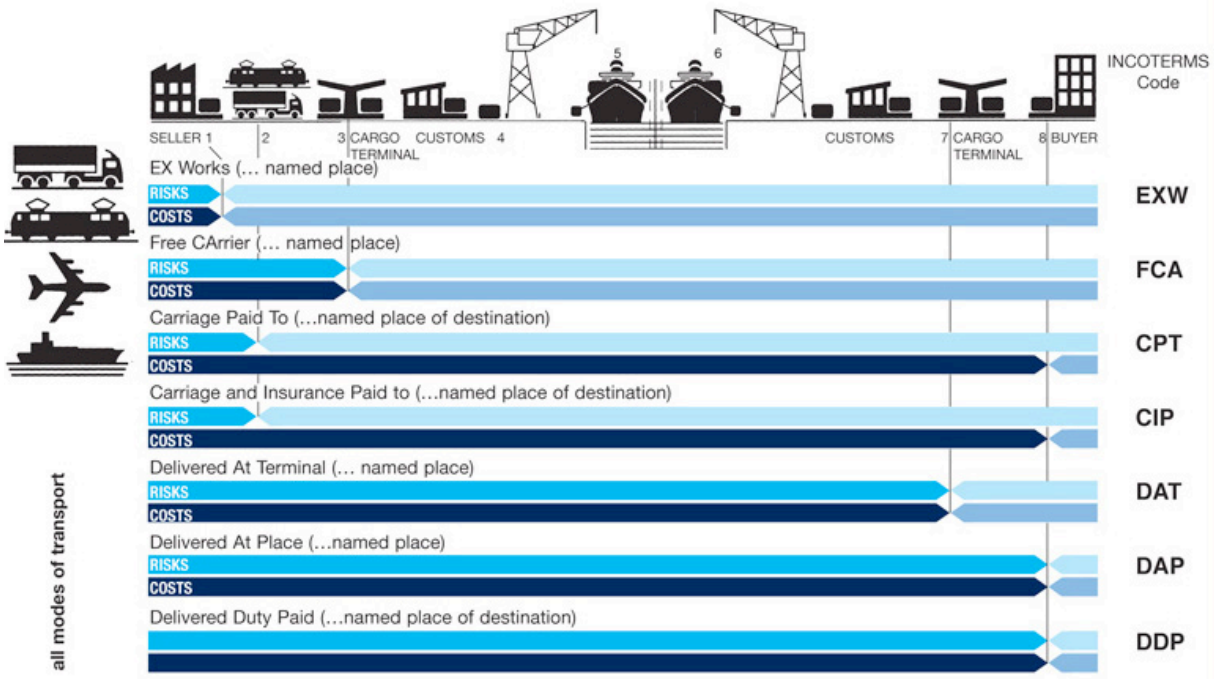
The 11 Incoterms 2010 rules		
1	EXW	Ex works
2	FCA	Free carrier
3	CPT	Carriage paid to
4	CIP	Carriage and insurance paid to
5	DAT	Delivered at terminal
6	DAP	Delivered at place
7	DDP	Delivered duty paid
8	FAS	Free alongside ship
9	FOB	Free on board
10	CFR	Cost and freight
11	CIF	Cost insurance and freight

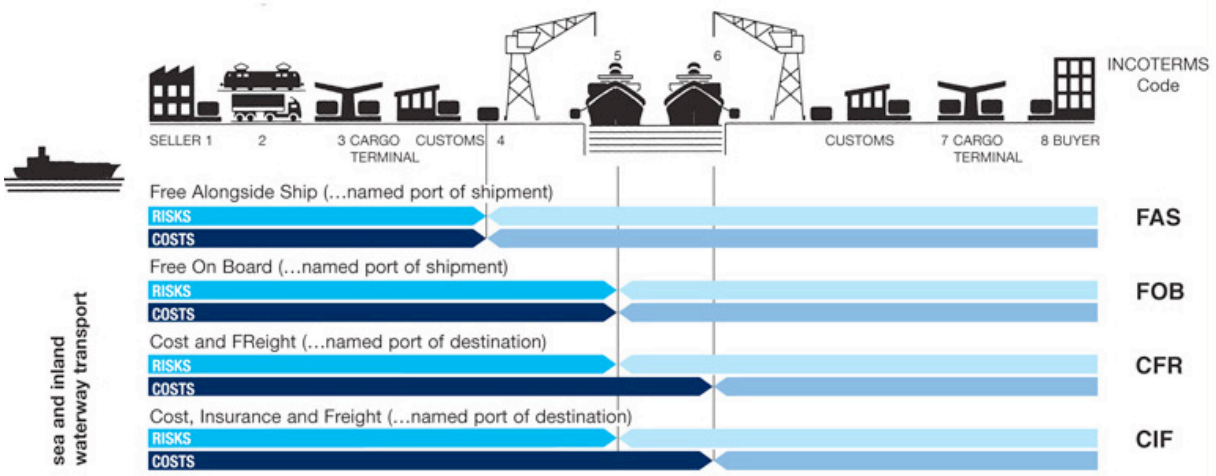
	Rules for any mode or modes of transport
	Rules for sea and inland waterway transport

Note: an Incoterm must be accompanied by a "named place" ex. "FOB Sydney", "EXW Tahiti"	
EXW (Ex Works)	The buyer bears all costs and risks involved in taking the goods from the seller's premises to the desired destination. The seller's obligation is to make the goods available at his premises (works, factory, warehouse). This term represents minimum obligation for the seller. This term can be used across all modes of transport.
FCA (Free Carrier)	The seller's obligation is to hand over the goods, cleared for export, into the charge of the carrier named by the buyer at the named place or point. If no precise point is indicated by the buyer, the seller may choose within the place or range stipulated where the carrier shall take the goods into his charge. When the seller's assistance is required in making the contract with the carrier the seller may act at the buyers risk and expense. This term can be used across all modes of transport.
CPT (Carriage Paid To)	The seller pays the freight for the carriage of goods to the named destination. The risk of loss or damage to the goods occurring after the delivery has been made to the carrier is transferred from the seller to the buyer. This term requires the seller to clear the goods for export and can be used across all modes of transport.
CIP (Carriage & insurance Paid to)	The seller has the same obligations as under CPT but has the responsibility of obtaining insurance against the buyer's risk of loss or damage of goods during the carriage. The seller is required to clear the goods for export however is only required to obtain insurance on minimum coverage. This term requires the seller to clear the goods for export and can be used across all modes of transport.

DAT **(Delivered At Terminal)**	New Term - May be used for all transport modes Seller delivers when the goods, once unloaded from the arriving means of transport, are placed at the disposal of the buyer at a named terminal at the named port or place of destination. "Terminal" includes quay, warehouse, container yard or road, rail or air terminal. Both parties should agree the terminal and if possible a point within the terminal at which point the risks will transfer from the seller to the buyer of the goods. If it is intended that the seller is to bear all the costs and responsibilities from the terminal to another point, DAP or DDP may apply. **Responsibilities:** - Seller is responsible for the costs and risks to bring the goods to the point specified in the contract - Seller should ensure that their forwarding contract mirrors the contract of sale - Seller is responsible for the export clearance procedures - Importer is responsible to clear the goods for import, arrange import customs formalities, and pay import duty - If the parties intend the seller to bear the risks and costs of taking the goods from the terminal to another place then the DAP term may apply
DAP **(Delivered At Place)**	New Term - May be used for all transport modes Seller delivers the goods when they are placed at the disposal of the buyer on the arriving means of transport ready for unloading at the named place of destination. Parties are advised to specify as clearly as possible the point within the agreed place of destination, because risks transfer at this point from seller to buyer. If the seller is responsible for clearing the goods, paying duties etc., consideration should be given to using the DDP term. **Responsibilities:** - Seller bears the responsibility and risks to deliver the goods to the named place - Seller is advised to obtain contracts of carriage that match the contract of sale - Seller is required to clear the goods for export - If the seller incurs unloading costs at place of destination, unless previously agreed they are not entitled to recover any such costs - Importer is responsible for effecting customs clearance, and paying any customs duties
DDP **(Delivered Duty Paid)**	The seller is responsible for delivering the goods to the named place in the country of importation, including all costs and risks in bringing the goods to import destination. This includes duties, taxes and customs formalities. This term may be used irrespective of the mode of transport.
FAS **(Free Alongside Ship - named port of shipment)**	The seller must place the goods alongside the ship at the named port. The seller must clear the goods for export. Suitable only for maritime transport but NOT for multimodal sea transport in containers (see Incoterms 2010, ICC publication 715). This term is typically used for heavy-lift or bulk cargo.
FOB **(Free On Board - named port of shipment)**	The seller must load themselves the goods on board the vessel nominated by the buyer. Cost and risk are divided when the goods are actually on board of the vessel (this rule is new!). The seller must clear the goods for export. The term is applicable for maritime and inland waterway transport only but NOT for multimodal sea transport in containers (see Incoterms 2010, ICC publication 715). The buyer must instruct the seller the details of the vessel and the port where the goods are to be loaded, and there is no reference to, or provision for, the use of a carrier or forwarder. This term has been greatly misused over the last three decades ever since Incoterms 1980 explained that FCA should be used for container shipments.
CFR **(Cost and Freight)**	The seller must pay the costs and freight required in bringing the goods to the named port of destination. The risk of loss or damage is transferred from seller to buyer when the goods pass over the ship's rail in the port of shipment. The seller is required to clear the goods for export. This term should only be used for sea or inland waterway transport.
CIF **(Cost, Insurance & Freight)**	The seller has the same obligations as under CFR however he is also required to provide insurance against the buyer's risk of loss or damage to the goods during transit. The seller is required to clear the goods for export. This term should only be used for sea or inland waterway transport.

ANNEX C5 cont'd Explanation of "Incoterms 2010"





Risks
The possibility that an event may occur which could cause loss of or damage to the goods is a "risk". Buyers and / or sellers can protect themselves against risks by transport-insurance.

Costs
Covers all costs except costs of documents. Sales and purchase contracts should clearly state which costs on transfer of the goods are for account of buyer and / or seller.

Remark: For detailed explanation reference is made to ICC publication INCOTERMS 2010

ANNEX D1 Enforcement structure questionnaire[48]

Enforcement structure questionnaire

Introduction

This questionnaire aims at gathering some basic information about the port where the inspections are (to be) performed and how the enforcement of waste shipments is organised in terms of legal framework, collaboration and competences. Consultation with other relevant authorities, such as the harbour authorities, customs, port police, etc, might be required.

Country:
Completed by:
Organization:
Date:

1. PORT FACTS
Please provide some basic information about the port(s).

1.1 Name of the port:
1.2 Geographical location:
1.3 Main connections/shipping routes:
1.4 Main shipping lines that address the port:
1.5 Main goods/loads that pass the port:
1.6 Number of deepwater quays:
1.7 Total length of deepwater quays:
1.8 Does the port provide feeder service to inland destinations? ☐ Yes ☐ No
1.9 Container through put in 2010 (in TEU):
1.10 Container input in 2010 (in TEU):
1.11 Container out put in 2010 (in TEU):
Please describe short the port procedure for import of goods/waste:

2. LEGAL FRAMEWORK
To actually implement and enforce the provisions of the Basel Convention, a national legislative framework is required. Please indicate the legislative framework in place.

2.1 Is your National Legal System dualistic or monistic with regard to International law? (Dualistic, if to transpose an International Convention a national law is needed; Monistic if the International Convention applies automatically after the deposition of the act of ratification.)
☐ Dualistic ☐ Monistic

2.2 Is there a legal or policy framework on waste implemented in your country?
☐ Yes ☐ No If not, is it currently being prepared? ☐ Yes ☐ No

2.3 Is there a legal or policy framework specifically focusing on the transboundary movements of e-wastes, or e-wastes management in your country?
☐ Yes ☐ No If not, is it currently being prepared? ☐ Yes ☐ No
If yes, please specify:

2.4 Does national law include enforcement competences?
☐ Yes ☐ No

2.5 Does the national law include provisions for collaboration with involved authorities/agencies?
☐ Yes ☐ No

2.6 Is there national law in place that restricts the import of certain goods that have reached a certain age? (for example personal vehicles older than 8 years or personal computers older than 5 years)
☐ Yes ☐ No
If yes, please specify which goods and their age limit:

[48] *This questionnaire has been developed under the SBC E-waste Africa project.*

3. INVOLVED ORGANISATIONS AND COLLABORATIONS ISSUES

The monitoring of imports of electronic and electrical goods (either as second hand or as waste) is not a matter for a single authority but requires the support of others too. Please indicate which authorities are involved and how they collaborate.

3.1 List the authorities that play a role in the port concerning the import of (W)EEE (if possible specify also contact persons, phone numbers and email addresses):

3.2 Is there any cooperation between these authorities: ☐ Yes ☐ No

3.3 If so, how is this cooperation arranged:

- ☐ Memorandum of Understanding
- ☐ By law
- ☐ Operational agreement
- ☐ Informally

Otherwise, namely:

3.4 On what level and what topics:

- ☐ Political level
- ☐ Strategic level
- ☐ Operational level, namely: ☐ training ☐ information sharing ☐ joint inspections

3.5 How is the collaboration agreement implemented (e.g. frequent meetings, calls, email, contact list, etc)

3.6 Do the authorities collaborate with other countries in the region in relation to waste shipments?

☐ Yes ☐ No

If so, with who and how:

4. LEGAL POWERS AND COMPETENCES

Please indicate which competences the involved authorities have in the port (Possible answers: yes, no, unknown, not applicable)

Competence	MoE	EPA	Customs	Police	Port authority	Other
Stop containers or vehicles						
Open containers or vehicles						
Inspect containers or vehicles						
Enter port terminal						
Inspect documents						
Take samples / perform testing						
Analyse samples						
Detain shipments for further investigation						
Prosecute illegal waste shipments						
Other competences						

5. INSPECTIONS

If currently inspections are performed in the port on (W)EEE, please describe how these are prepared, what type of source initiates the inspection, how they are performed and what is done in case of non-compliance.

6. MATERIAL AVAILABLE FOR INSPECTIONS

Please describe what material is currently available for day-to-day inspections in the port.

- ☐ Personal protection gear (helmet, gloves, jackets, etc)
- ☐ Photo camera
- ☐ Computer
- ☐ Internet connection
- ☐ Guidance documents or manuals
- ☐ Copy machine
- ☐ Electricity and extension cables
- ☐ Container chains
- ☐ Sampling material
- ☐ Secure area at the port to perform inspections
- ☐ Other material, namely:

7. DIFFICULTIES IN ENFORCEMENT OR GAPS IN THE STRUCTURE

Please describe if difficulties that are expected or already encountered when performing port checks on (W)EEE; for example with regard to lack of capacity, means, knowledge, cooperation with other organisations, exchange of knowledge on national and/or international level and/or vague legislation/definitions/ misinterpretations of concepts.

8. OTHER IMPORTANT INFORMATION / FACTS IMPORTANT TO KNOW

ANNEX D2 Exercise questions to introduce the use of the inspection and enforcement manual[49]

Please, put yourself in the position of an inspector / inspection manager, or simply look from the perspective of your own position, and judge the practical value of the manual for one or more of the following situations:

Do not solve the problem but judge the quality of the manual only.

a. As a manager, you have the wish to change / intensify the collaboration with fellow authorities in your port. You would like to see an example of another country or another port and to learn what could be applicable at your port. The manual provides guidance on how it can be done and the steps that are needed.

b. As an inspector you have been ordered to inspect a load of 'used household goods'. You know that you usually approve everything that is in the container and limit yourself to determining the import duties. But now you have been ordered to make a distinction between UEEE and e-waste. You would like to use the manual for a step by step guidance, choosing between waste or not waste.

c. As an inspector you have concluded that a significant amount of WEEE makes part of the shipment. This is not allowed for import. What are the steps to take now? How to report your findings? How to consider/decide/organize/realize a take back procedure. What does the manual say?

d. As an inspector you see many wrong things passing through your port, especially large amounts of poor quality UEEE and even WEEE. You would like to convince your manager to hire additional colleagues and to implement a stricter regime because you feel that this situation must be tackled. First, you will need to convince your very busy manager of the importance of the problem. You would like to find information in the Manual that will help to convince your manager, including regarding the seriousness of the problem and the steps that your manager could possibly take.

e. As an inspector you observe a certain pattern in the origin and the quality of the UEEE/WEEE that you see so often. You wish to contact authorities in the country of export. But your organization is not involved in any international network. Where to start? What to expect from which network? How to address this question in your organization? Does the manual help?

[49] *This exercise has been developed under the SBC E-waste Africa project.*


Receiver:
Adress:
Country:
Phone:
Phone
Fax
Website
Email