**draft TECHNICAL Guidelines on transbouNdary movements of electronic and electrical WASTE (e-waste), in particular regarding the distinction between waste and non-waste**

**Draft for consultation**

**(Version 8 May 2012)**

**Contents**

[Acronyms and Abbreviations 3](#_Toc285740495)

[I. Introduction 4](#_Toc285740496)

[II. Relevant provisions of the Basel Conventions 5](#_Toc285740497)

[III. Guidance on the distinction between waste and non-waste 7](#_Toc285740498)

[IV. Procedures for transboundary transport of used equipment that is not waste 8](#_Toc285740499)

[IV. Guidance on transboundary movements of e-waste 13](#_Toc285740500)

[VI. Guidance on control of transboundary movements of used equipment and e-waste 15](#_Toc285740501)

[Appendix I Glossary of Terms 17](#_Toc285740502)

[Appendix II Examples of functionality tests 17](#_Toc285740503)

[Appendix III Correlation between the Harmonized System Codes and Basel Convention lists 19](#_Toc285740504)

[Annex IV References 17](#_Toc285740505)

# Acronyms and Abbreviations

AQSIQ Administration of Quality Supervision, Inspection and Quarantine of People’s Republic of China

BAN Basel Action Network

BFR Brominated Flame Retardant

CCIC China Certification & Inspection Group

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 Tubes

EC European Community

HS Harmonized Commodity Description and Coding System (or short: Harmonized System)

kg Kilogram

LCD Liquid Crystal Display

mg Milligram

MPPI Mobile Phone Partnership Initiative

PACE Partnership for Action on Computing Equipment

PBB Polybrominated biphenyls

PCB Polychlorinated biphenyls

PCN Polychlorinated naphthalenes

PCT Polychlorinated terphenyls

PVC Polyvinylchloride

UNECE United Nations Commission for Europe

UNU United Nations University

WCO World Customs Organisation

# I. Introduction

## A. Scope

1. The present technical guidelines provide guidance for managing transboundary movements of electronic and electrical waste (r e-waste) and used electrical and electronic equipment (further used equipment), that may be e-waste, in particular on the distinction between waste and non-waste pursuant to decisions IX/6, X/5 and BC-10/5 of the Conference of the Parties to the Basel Convention on the control of Transboundary Movement of Hazardous Wastes and Their Disposal (further: the Convention).
2. These guidelines focus on the aspects related to transboundary movements of e-waste and used equipment that may be e-waste. In particular the distinction between used equipment destined for repair, refurbishment or direct reuse and e-waste destined for disposal has proven to be problematic for authorities to define and to evaluate. Further these guidelines must consider which e-waste is hazardous waste or “other waste” and therefore would fall under the provisions of the Convention. Without such distinctions it is difficult for enforcement agencies to assess if the provisions of the Basel Convention for transboundary movements apply, as the Convention only applies to hazardous wastes and other wastes. For materials removed from e-waste e.g. metals, plastics, batteries, PVC-coated cables or activated glass the distinction between waste and non-waste does not pose particular problems that have to be addressed in these guidelines.
3. The present technical guidelines provide:
4. information on the relevant provisions of the Convention applicable to transboundary movements of e-waste;
5. guidance on the distinction between waste and non-waste when equipment is moved across borders
6. guidance on the distinction between hazardous waste and non-hazardous waste; and
7. general guidance on transboundary movements of used equipment and e-waste and enforcement of the control provisions of the Convention.
8. These guidelines are intended for government agencies including enforcement agencies that wish to implement, control and enforce legislation and provide training regarding transboundary movements. They are also intended to inform all actors involved in the management of e-waste and used equipment so they can be aware of this guidance when preparing or arranging for transboundary movements of such items and who wish to avoid non-compliance with the Basel Convention and related legislation.
9. Their application should help reduce transboundary movements to the minimum consistent with the environmentally sound and efficient management of such wastes and to reduce the environmental burden of e-waste that currently may be exported to countries and facilities that cannot handle it in an environmentally sound manner.
10. The procedures suggested in these guidelines would be subject to further review at specific time intervals in order to ensure that the objective of environmentally sound management is upheld and to reflect the knowledge and experience gained.
11. These guidelines do not cover other aspects of environmentally sound management of e-wastes such as collection, treatment and disposal. These aspects will be covered where appropriate in other guidance documents. In particular a series of guidelines were developed in the context of the following public-private partnership initiatives under the Basel Convention:
12. Mobile Phone Partnership Initiative (MPPI):
13. Awareness raising and design considerations (MPPI, 2009a)
14. Collection (MPPI, 2009b)
15. Transboundary movement (MPPI, 2009 c)
16. Refurbishment (MPPI, 2009 d)
17. Material recovery and recycling (MPPI, 2009 e).
18. Partnership for Action on Computing Equipment (PACE):
19. Environmentally Sound Management Criteria Recommendations
20. Guideline on Environmentally Sound Testing, Refurbishment, and Repair of Used Computing Equipment
21. Guideline on Environmentally Sound Material Recovery and Recycling of End-of-Life Computing Equipment
22. Guideline on Transboundary Movement (TBM) of Used and End-of-Life Computing Equipment.

Similarly, guidelines covering other aspects of the management of used and end-of-life computing equipment are being developed within the Partnership on Computing Equipment (PACE).

## B. About e-waste

1. E-waste consists of electrical and electronic equipment that is no longer suitable for use or that the last owner has discarded with the view of its disposal i.e. recycling, recovery or disposal not leading to recovery. The volume of e-waste being generated is growing rapidly, due to the wide use of this equipment, both in developed countries and in developing countries. The total amount of global e-waste generated in 2005 was estimated to be 40 million tonnes (StEP, 2009). The amount of e-waste in the EU was estimated between 8.3 and 9.1 million tonnes in 2005 and expected to reach some 12.3 million tonnes in 2020 (UNU, 2007). In developing countries and countries with economies in transition the sales of electrical and electronic equipment are increasing rapidly. Therefore the domestic generation of e-waste is likely to increase significantly in those countries. Currently e-waste is often exported from developed countries to developing countries that are not likely to possess the infrastructure and societal safety nets to prevent harm to human health and the environment. Driving factors for such exports include that the treatment may be less expensive than managing the waste domestically due to less diligent environmentally sound management but also the availability of markets for raw materials or recycling facilities and the location of manufacturers of electrical and electronic equipment.
2. The magnitude of these exports is difficult to assess. BAN (2002) suggested that 50 – 80% of the e-waste delivered to companies for recycling in North-America is exported, mainly to China and other East Asian countries for cheap recycling and other disposal of residues due to the low labour costs and less stringent environmental regulations in this region. Yu Xiezhi et al (2008) confirm these practices and suggest similar percentages of export.
3. E-waste may contain hazardous substances such as lead, mercury, PCB, asbestos and CFC’s that pose risks to human health and the environment when improperly disposed of or recycled and that require specific attention as to their environmentally sound waste management. In most developing countries and countries with economies in transition capacity to manage the hazardous substances in e-waste is lacking. As an example, the informal recovery industry in Asia supplies manufacturers with some recycled raw materials. There is clear evidence however that the practice exploits women and child labourers who cook circuit boards, burn cables, and submerge equipment in toxic acids to extract precious metals such as gold (Schmidt, 2006) and subjects them and their communities to damaged health and a degraded environment. Moreover, the techniques used by the informal sector are not only damaging human health and the environment; often they also perform poorly as to their efficiency in recovering valuable resources, squandering precious resources such as critical metals for future use. Even management of non-hazardous wastes can cause significant harm to human health and the environment if not undertaken in an environmentally sound manner.
4. E-waste contains valuable materials that can be recovered for recycling including iron, aluminium, copper, gold, silver, platinum, palladium, indium, gallium and other rare earth metals. The extraction of all of these metals from the Earth has significant environmental impact. And the use of such waste materials as a resource for raw materials can lead to conservation of energy and reduction in greenhouse gas emissions when adequate technologies and methods are applied.
5. Direct reuse or reuse after repair or refurbishment can contribute to sustainable development. Reuse extends the lifetime of the equipment and may provide for access to such equipment for groups in society that otherwise would not have access to it due to reduced costs of second-hand equipment. Failure to handle equipment properly, however, can have negative impacts and often entail disposal when parts are replaced and discarded. The lack of clarity in defining when equipment is waste and when it is not has led to a number of situations where such equipment was exported to, in particular, developing countries ostensibly for reuse where a large percentage of these goods in fact were not suitable for further use or were not marketable and had to be disposed of in the developing country as waste. The presence of hazardous substances and components in this equipment and the lack of adequate installations to treat those in an environmentally sound manner has led to serious problems for human health and the environment in the countries receiving this e-waste.

# II. Relevant provisions of the Basel Convention

1. **General provisions of the Basel Convention**
2. The Basel Convention, which entered into force on 5 May 1992, stipulates that any transboundary movement of wastes (export, import, or transit) is permitted only when the movement itself and the disposal of the concerned hazardous or other wastes are environmentally sound.
3. In its Article 2 (“Definitions”), paragraph 1, the Basel Convention defines wastes as “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”. In paragraph 4 of that Article, it defines disposal as “any operation specified in Annex IV” to the Convention. In paragraph 8, it defines the environmentally sound management of hazardous wastes or other wastes as “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”.
4. Article 4 (“General obligations”), paragraph 1, establishes the procedure by which Parties exercising their right to prohibit the import of hazardous wastes or other wastes for disposal shall inform the other Parties of their decision. Paragraph 1 (a) states: “Parties exercising their right to prohibit the import of hazardous or other wastes for disposal shall inform the other Parties of their decision pursuant to Article 13.” Paragraph 1 (b) states: “Parties shall prohibit or shall not permit the export of hazardous or other wastes to the Parties which have prohibited the import of such waste when notified pursuant to subparagraph (a).”
5. Article 4, paragraphs 2 (a)–(d), contains key provisions of the Basel Convention pertaining to ESM, waste minimization, and waste disposal practices that mitigate adverse effects on human health and the environment:

“Each Party shall take appropriate measures to:

(a) Ensure that the generation of hazardous wastes and other wastes within it is reduced to a minimum, taking into account social, technological and economic aspects;

(b) Ensure the availability of adequate disposal facilities, for the environmentally sound management of hazardous wastes and other wastes, that shall be located, to the extent possible, within it, whatever the place of their disposal;

(c) Ensure that persons involved in the management of hazardous wastes or other wastes within it take such steps as are necessary to prevent pollution due to hazardous wastes and other wastes arising from such management and, if such pollution occurs, to minimize the consequences thereof for human health and the environment; and

(d) Ensure that the transboundary movement of hazardous wastes and other wastes is reduced to the minimum consistent with the environmentally sound and efficient management of such wastes, and is conducted in a manner which will protect human health and the environment against the adverse effects which may result from such movement”.

1. **Control procedure for transboundary movements**
2. Hazardous wastes and other wastes should, as far as is compatible with their ESM, be disposed of in the country where they were generated. Transboundary movements of such wastes are permitted only under the following conditions:

(a) If conducted under conditions that do not endanger human health and the environment;

(b) If exports are managed in an environmentally sound manner in the country of import or elsewhere;

(c) If the country of export does not have the technical capacity and the necessary facilities to dispose of the wastes in question in an environmentally sound and efficient manner;

(d) If the wastes in question are required as a raw material for recycling or recovery industries in the country of import; or,

(e) If the transboundary movements in question are in accordance with other criteria decided by the Parties.

1. Any transboundary movements of hazardous and other wastes are subject to prior written notification from the exporting country and prior written consent from the importing and, if appropriate, transit countries. Parties shall prohibit the export of hazardous wastes and other wastes if the country of import prohibits the import of such wastes. The Basel Convention also requires that information regarding any proposed transboundary movement is provided using the accepted notification form and that the approved consignment is accompanied by a movement document from the point where the transboundary movement commences to the point of disposal.
2. Furthermore, hazardous wastes and other wastes subject to transboundary movements should be packaged, labelled and transported in conformity with international rules and standards.[[1]](#footnote-1)
3. When transboundary movement of hazardous and other wastes to which consent of the countries concerned has been given cannot be completed, the country of export shall ensure that the wastes in question are taken back into the country of export for their disposal if alternative arrangements cannot be made. In the case of illegal traffic (as defined in Article 9, paragraph 1), the country of export shall ensure that the wastes in question are taken back into the country of export for their disposal or disposed of in accordance with the provisions of the Basel Convention.
4. No transboundary movements of hazardous wastes and other wastes are permitted between a Party and a non-Party to the Basel Convention unless a bilateral, multilateral or regional arrangement exists as required under Article 11 of the Basel Convention.
5. **Definitions of waste and hazardous waste**
6. The Convention defines waste as "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). It is important to note that national provisions concerning the definition of waste may differ and, therefore, the same material may be regarded as waste in one country but as a non waste in another country.
7. Hazardous waste is defined in the Convention as “wastes that belong to any category contained in Annex I, unless they do not possess any of the characteristics contained in Annex III; (definition in article 1 paragraph 1.a) and wastes that are not covered under paragraph 1.a but are defined as, or considered to be, hazardous wastes by the domestic legislation of the Party of export, import or transit” (definition in article 1 paragraph 1.b). The definition of hazardous waste therefore incorporates domestic law such that material regarded as a hazardous waste in one country but not in another country is defined as hazardous waste under the Convention. The Convention also requires that Parties inform the other Parties, through the Secretariat of their national definitions (article 3). Providing detailed and specific information on the national definitions of hazardous waste can avoid ambiguity concerning the applicability of national definitions.
8. To aid in distinguishing hazardous wastes from non-hazardous wastes for the purpose of Article 1.1.a two Annexes have been inserted into the Convention. Annex VIII includes wastes considered to be hazardous according to Article 1.1 (a) of the Convention unless they do not possess any of the characteristics of Annex III. Annex IX includes wastes that are not covered by Article 1.1 (a) unless they contain Annex I material to an extent causing them to exhibit an Annex III characteristic. Both Annex VIII and Annex IX include listings for various types of e-waste. More information on the distinction between hazardous and non hazardous e-waste is included in section V B of these guidelines.

# III. Guidance on the distinction between waste and non-waste

1. **General considerations**
2. To determine if 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.
3. Where the exporters of used equipment claim that this is intended to be or is a movement of used equipment intended for direct reuse 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):
4. a copy of the invoice and contract relating to the sale and/or transfer of ownership of the equipment with a signed statement that indicates that the equipment had been tested and is destined for direct reuse and fully functional[[2]](#footnote-2) and proof of the final destination of the equipment;
5. evidence of evaluation/testing in the form of copy of the records (certificate of testing – proof of functional capability) on every item within the consignment and a protocol containing all record information (see Section IV A);
6. a declaration made by the exporter of the equipment that none of the equipment within the consignment is waste as defined by national law of the countries involved in the movement (countries of export and import, and, if applicable countries of transit) and;
7. appropriate protection against damage during transportation, loading and unloading, in particular through sufficient packaging and/or stacking of the load.
8. **Situations where equipment would normally be considered waste, or not**
9. Equipment would normally not be considered waste:
10. where the criteria in paragraph 26 (a) to (d) are met and if it 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 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
11. where the criteria in paragraph 26 (c) and (d) are met and if it is sent back as defective batches for repair to the producer[[3]](#footnote-3) (under warranty) with the intention of receiving it back for reuse.
12. Factor suggesting that used equipment would normally be considered waste include:
13. the equipment is not complete - essential parts are missing and the equipment cannot perform its essential key functions;
14. it shows a defect that materially affects its functionality and fails relevant functionality tests;
15. it shows physical damage that impairs its functionality or safety, as defined in relevant standards;
16. the protection against damage during transport, loading and unloading operations is inappropriate, e.g. the packaging or stacking of the load is insufficient;
17. the appearance is particularly worn or damaged, thus reducing the marketability of the item(s);
18. the item has among its constituent part(s) hazardous components that are required to be discarded or are prohibited to be exported or used in such equipment under national legislation[[4]](#footnote-4);
19. the equipment is destined for disposal or recycling instead of reuse;
20. there is no regular market for the equipment ;
21. it is destined for cannibalization (to gain spare parts); or
22. the price paid for the items is significantly lower than would be expected from functional equipment intended for reuse.

# IV. Procedures for transboundary movements of used equipment that is not waste

1. **Recommended procedure for transboundary movements of used equipment suitable for direct reuse without repair or refurbishment**
2. 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 26 are met. Failure to meet these criteria would generally indicate to the relevant authorities that the material is e-waste (see section VI). In some jurisdictions, however, it remains for the state authorities to prove that the used equipment at issue is e-waste.
3. Exporters that prepare an export of used equipment rather than e-waste are recommended to take the following steps:

**Step 1: Evaluation / testing**

1. Evaluation of the potential suitability for direct reuse and testing of the items that are evaluated as potentially suitable for direct reuse should be undertaken to ensure that used equipment is suitable for direct reuse. The tests to be conducted depend on the kind of equipment. Functionality should be tested and presence of hazardous substances or components should be evaluated. The completion of a visual inspection without testing functionality is unlikely to be sufficient. For most of the equipment a functionality test of the key functions is sufficient. Section V B of these guidelines provides guidance on the evaluation for the presence of hazardous substances and components. Appendix II gives examples of functionality tests for certain categories of used equipment.

**Step 2: Recording**

1. 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 or on its packaging. The record should contain the following information:
2. name of the item;
3. identification number of the item (type no.), where applicable;
4. year of production (if available);
5. name and address of the company responsible for evidence of functionality;
6. result of tests (e. g. naming defective parts and defect or indication of full functionality);
7. kind of tests performed.
8. 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.

**Step 3: Appropriate protection against damage**

1. The used equipment should be appropriately protected from damage during transportation, loading and unloading in particular through sufficient packaging or appropriate stacking of the lead. Insufficient protection of the load against damage is an indication that the equipment may be waste. In general, the observation of inappropriate protection of the load against damage should lead enforcement agencies/authorities to make further enquiries regarding an item being transported.
2. A flow scheme representing the recommended procedure for equipment destined for direct reuse is given in figure 1.

**Figure 1:** Recommended procedure for used equipment suitable for direct reuse

1. **Recommended procedures to follow in case of transboundary movements of used equipment destined for repair or refurbishment**
2. Certain Parties may consider used equipment destined for repair, refurbishment or upgrading to be waste, while others may not. In accordance with the principles of the Convention, if one of the countries concerned considers this used equipment to be waste the procedures on transboundary movement of e-waste as indicated in section V A of this guidance should be followed. Note that in some cases, the decision to classify used equipment destined for repair or refurbishment as a hazardous waste could result in the imposition of a ban on the export or import of such equipment under national legislation or pursuant to the Convention’s prohibition on trade with non-Parties.
3. If, however, following Article 2.1 of the Basel Convention and national legislation, none of the Parties involved in a transboundary movement has determined that used equipment destined for repair or refurbishment in the importing country are classified as hazardous wastes or other wastes, the Basel Convention control procedure will not apply. Parties have expressed concerns that used equipment has been transported to their countries as destined for repair or refurbishment but in fact intended for disposal and such waste could enter their country without them knowing this and therefore without a possibility to oppose or to identify conditions to such movements in case this would create environmental problems. Therefore the voluntary notification procedure, described in this Section should be considered by the countries involved to ensure that such movements are being monitored, and the importing country is given an opportunity to react (consent, object, or identify conditions) to such movements. Alternatively, the countries involved may also consider applying the procedures applicable for transboundary movements of waste to such movements, even though the equipment is not considered to be waste.

**Voluntary Notification Procedure**

1. In cases where used equipment is exported regularly to the same repair, refurbishment or upgrading facility by the same exporter, and if there is no existing agreement between the exporter and the governmental authorities (importing and exporting countries), the exporter should provide a Statement of Evaluation and Intent to Reuse ("the Statement") to the Governmental Authority[[5]](#footnote-5) of the countries of export, import, and transit (if any), by means of email, fax or other agreed method, prior to the departure of the movement from the country of export. The Statement is intended to promote transparency and assist governments in distinguishing legitimate transboundary movements of equipment for environmentally sound refurbishment, repair and reuse from illegal movements of (potentially hazardous) e-waste for recycling that an exporter attempts to move under the guise of “reuse” so as to avoid legal controls on waste movements. One Statement would be sufficient for movements within a defined time period for up to one year, or other time period as agreed by the Parties involved.
2. In the case of single movement greater than a specific quantity[[6]](#footnote-6) as agreed to by the parties involved (especially of trial movements to a new repair or refurbishment facility), that have been evaluated and assessed to be likely suitable for reuse, the exporter should provide a Statement to the Governmental Authority of the countries of export, import, and transit (if any), by means of e-mail, fax, or other agreed to method, prior to the departure of the movement from the country of export. In this case, the Statement would substitute an actual amount of material for the movement instead of the maximum amount as would be the case for a Statement of equipment that is regularly exported to the same facility.
3. Statements, as described in paragraph 38 and 39, should include the following:
4. a reference that the load is not considered to be waste by any of the countries involved;
5. a commitment by the exporter that applicable guidelines for the environmentally sound management of the equipment are to be followed and assurances that such transported equipment destined for reuse and will be managed in an environmentally sound manner[[7]](#footnote-7);
6. a description of the movement, in particular, content, maximum count, packaging to ensure safe movement and adequate protection of the equipment;
7. an indication whether the information is for a single movement or multiple movements, and estimated frequency at which such movements are to take place;
8. an indication of the proposed date of the first and the last movement during the defined time period;
9. identification of the route (including ports of export and import);
10. identification of and contact information (name, address and phone number) of the importer and exporter;
11. a description of the evaluation used to determine that the used equipment in the movement are suitable for reuse, possibly after repair, refurbishment or up-grading;
12. identification of and contact information (name, address, and phone number) of local persons associated with the importer and exporter who can provide any additional information about the movement;
13. information on how residues and wastes arising from repair, refurbishment or upgrading operations will be managed.
14. All item of used equipment, individually or in partitioned batches, should be appropriately documented with reference to the above-mentioned Statement, or other suitable method, so that recipients in the importing country are properly informed.
15. The Governmental Authorities should acknowledge by e-mail, fax or other agreed method the receipt of the Statement within the 3 working days, or other agreed time period, and should send this acknowledgement to the states concerned and to the exporter and the importer. After this time period has elapsed, any evidence of effective delivery of the Statement to the Governmental Authorities will be deemed as the acknowledgement date. If the Governmental Authorities have provided authorization or have not responded within the 14 calendar days from the acknowledgement date, transboundary movement may commence for the single movement or the movements within the period of time defined in the Statement. An updated Statement might be submitted at any time. However:
16. if further information[[8]](#footnote-8) is requested by the Governmental Authority of the state of export, import or transit, such information should be provided before commencement of the movement.
17. if the response indicates that there is no objection, but suggests conditions, then the movement may commence only after necessary conditions have been taken into account.
18. The Statement is provided solely for use by the Governmental Authority and is not for disclosure to third parties if the statement is marked as business confidential.

**Alternative procedure**

1. Alternatively the Parties involved may want to decide that, on a voluntary basis the procedures applicable for waste as indicated in Section V A would be applied.
2. The Basel Convention procedure for hazardous waste controls could be utilized for equipment that contains hazardous components or substances that would need to be disposed of as a result of the repair or refurbishment operations after its importation into the country of destination. A voluntary procedure for non-hazardous waste could be utilized for transboundary movements if the equipment does not contain hazardous components or substances that would need to be disposed of as a result of the repair or refurbishment operations.
3. A flow scheme representing the alternative procedure for equipment destined for repair or refurbishment is given in figure 2.

**Figure 2** Alternative procedure for used equipment destined for repair or refurbishment.

# V. Guidance on transboundary movements of e-waste

1. **General considerations**
2. 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 must be respected. Where no such national prohibitions apply the control procedure as mentioned in Section II B of these guidelines applies. 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[[9]](#footnote-9) or the procedure for pre-movement inspection of recycling materials as applicable for China[[10]](#footnote-10).
3. 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. If this approach is taken and the applicable procedures are not followed, the movement would be regarded as illegal.
4. **Distinction of hazardous waste and non-hazardous waste**
5. E-waste are included in Annex VIII of the Convention with the following entry for hazardous wastes:

A1180 Waste electrical and electronic assemblies or scrap[[11]](#footnote-11) 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)[[12]](#footnote-12).

1. 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[[13]](#footnote-13) (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 reuse,[[14]](#footnote-14) and not for recycling or final disposal[[15]](#footnote-15)

1. Electronic equipment will often contain hazardous components examples of which are indicated in the entry A1180 of Annex VIII. E-waste should therefore be assumed hazardous unless it can be shown that it does not contain such components and in particular[[16]](#footnote-16):
2. 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;
3. 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;
4. 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;
5. 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, organohalogen compounds other than substances referred to elsewhere in Annex I. They are likely to possess hazard characteristics H6.1, H11, H12 and H13;
6. 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;
7. plastic components containing Brominated Flame Retardants (BFRs), in particular BFR that are persistent organic pollutants according to the Stockholm Convention that can be 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 polybrominated biphenyl (PBB), or any other polybrominated analogues of these compounds, at a concentration of 50 mg/kg or more.” This waste also belongs to category Y45 in Annex I, “Organohalogen 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;
8. other components containing or contaminated with mercury, such as mercury switches, contacts, thermometers, which are assigned to annex VIII entry A 1010, A1030 or A1180. This waste also belongs to category Y29 in Annex I,” Mercury; mercury compounds” and is likely to possess hazard characteristics H6.1, H11, H12 and H13;
9. waste oils/liquids, which are assigned to annex VIII entry A 4060 “Waste oil/water, hydrocarbons/water mixtures, emulsions”. The waste belongs to category Y8 in Annex I, “Waste mineral oils unfit for their originally intended use” or Y9 in Annex I, “Waste oil/water, hydrocarbons/water mixtures, emulsions”, and is likely to possess hazardous characteristics H3, H11, H12and H13;
10. components containing asbestos, such as in wires, cooking stoves and heaters, which are assigned to annex VIII entry A 2050. The waste belongs to category Y 36 in Annex I, “Asbestos (dust and fibres)”, and is likely to possess hazardous characteristic H 11.

# VI. Guidance on control of transboundary movements of used equipment and e-waste

1. Inspections should be undertaken by competent bodies of state authorities (e.g. police, customs and (environmental) inspectors) at facilities and during the movement. Exporters of used equipment should ensure that it is accompanied by proof of adequate testing and that is appropriately protected against damage during transportation, loading and unloading, in particular through sufficient packaging or appropriate stacking of the load in order to demonstrate that the items concerned are not e-waste as indicated in section IV A.
2. For practical reasons of control it is recommended that every load of used equipment is also accompanied by a CMR document where applicablet[[17]](#footnote-17). This document contains a description of the goods transported using the Harmonized Commodity Description and Coding System (normally referred to as “Harmonized System”) developed by the World Customs Organization (WCO).
3. The Secretariat of the Basel Convention has cooperated with the WCO to establish a correlation between the entries in Annexes VIII and IX and the codes of the Harmonized System. The correlation table is included in Appendix III. This table can facilitate comparison of the CMR documents with the documents that should accompany the transport of used equipment or e-waste according to the procedures in these guidelines.
4. When e-waste is exported as non-hazardous waste the exporters should ensure that it is accompanied by evidence of appropriate testing or assessments to demonstrate that the waste that is being exported is non-hazardous and that the treatment of this waste is environmentally sound. When e-waste is exported as hazardous waste the documentation required under the control procedure of the Convention should be present during transport.
5. In the absence of appropriate documentation and protection against damage authorities are likely to presume the items to be (potentially hazardous) e-waste and, in the absence of consents in accordance with the requirements of the Basel Convention, should presume that the export is a case of illegal traffic as specified in Article 9 of the Convention. In these circumstances the relevant competent authorities would be informed and the provisions of take back as foreseen in Article 9 would be applied. Illegal traffic is to be considered a criminal offense in accordance with Article 4.3 of the Convention. In those jurisdictions where the burden is on the state authorities to prove the items are e-waste rather than used equipment, absence of the appropriate documentation and protection against damage is likely to lead to significant delays to the onward transport of the equipment whilst the necessary investigations are carried out to establish the status of the equipment.
6. Health and safety issues and potential risks for enforcement agents (such as customs officers) are a key priority for any inspection of transports of e-waste or used equipment. Enforcement officers should have specific training before doing such inspections. Particular care should be applied when opening containers. In particular if the transport consists of waste the items may not have been stacked in a stable way and items may fall out of the container when opening it for inspection. The load may also contain hazardous substances that could be released when inspecting the load.

# Appendix I Glossary of Terms

**Note:** *Some of these terms were developed for the purpose of the present guidelines and should not be considered as being legally binding, or that these terms have been agreed to internationally. Their purpose is to assist readers to better understand these guidelines. Insofar appropriate the use of these terms has been aligned with terms used in other guidelines developed under the Basel Convention.*

|  |  |
| --- | --- |
| **Basel Convention:** | United Nations Environmental Programme’s March 22, 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, which came into force in 1992. |
| **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 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). |
| **Environmentally sound management:** | Taking all practicable steps to ensure that used equipment and/or e-wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such equipment and or e-waste (cf. Article 2.8 of the Convention). |
| **Equipment:** | Electrical and electronic equipment which is dependent on electric currents or electromagnetic fields in order to work properly. |
| **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 reused. |
| **Fully functional:** | Equipment is fully functional when it has been tested and demonstrated to be capable of performing at least the essential key functions it was designed to perform. |
| **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. |
| **Reuse**: | 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. |
| **Used equipment**: | Equipment which has been used. |
| **Waste**: | 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). |

# Appendix II Examples of functionality tests

This appendix contains some examples of tests and procedures for functionality tests of electrical and electronic equipment. These test and procedures are used to assess if this equipment is suitable for reuse and were initially developed for computing equipment and mobile phones. The examples are not meant to be exhaustive but illustrate procedures as they are applied by some Parties[[18]](#footnote-18) [[19]](#footnote-19) [[20]](#footnote-20) or recommended in other guidance documents of the Basel Convention. Further testing methods for computing equipment are under development in the context of PACE[[21]](#footnote-21). 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 data.

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 reuse. This includes:

1. 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.
2. 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.
3. 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.
4. A battery test – testing the battery with a volt meter to indicate whether or not the battery is functional.

# 

# ANNEX II bis Examples of Hazards (as defined by Basel Convention) in Electronic Equipment

The following are constituent fractions found in Electronic Equipment, their likely location and any likely designation in the Basel Annexes for all or some of the material likely to be found in such a constituent. These annex listings are not definitive and may be subject to the interpretation of Parties within national jurisdictions. The Basel Annexes are used to determine whether or not the materials in question when known to be waste (destined to an Annex IV destination) are hazardous wastes or other wastes and therefore subject to the Basel Convention obligations. If the waste material is listed with an “A” (Annex VIII) listing it is likely to be a hazardous waste (exceptions noted in Annex VIII chapeau). If the waste material has both a “Y” (Annex I) and an “H” (Annex III) listing together, then it is likely that the waste material is a Basel hazardous waste unless it can be demonstrated that it does not in fact don’t possess an Annex III characteristic. If the waste material only possesses a “Y” listing it is not likely to be a Basel hazardous waste unless it can be shown to possess an Annex III hazardous characteristic.

| **Table 1: Desktop Computers** | | |
| --- | --- | --- |
| **Primary Constituents:** | **Locations in Device** | **Basel Annex Listings[[22]](#footnote-22)** |
| Iron, Steel and other Fe compounds1 | Case, components |  |
| Plastics2 | Case, circuit board, connectors, wire insulation etc. | Y13  A3050 |
| Copper (Cu) and compounds (including brass) | Circuit board, wires, connectors | Y22 |
| Aluminum (Al) | Heatsinks, components |  |
| Poly Vinyl Chloride (PVC) | Wire and cable insulation | Y45 A3050 |
| Glass, ceramic, semiconductor | Circuit boards, components |  |
| Nickel (Ni) and compounds | Components, fasteners |  |
| Tin (Sn) | Solder, components |  |
| Lead (Pb) | Solder, components | Y31  H6.1, H11, H12, A1010, A1020, A1180 |
| Flame Retardants | Case, circuit boards, components, insulation | Y13, Y45, Y37  H11, A3050 |
| **Minor Constituents** | **(typically less than 0.1%)** |  |
| Liquids (organic solvents and water) | Capacitors | Y41, Y42  H3, H6.1, A3150, A3140 |
| Beryllium (Be) | Connectors | Y20,  H11, H6.1, A1010, A1020, |
| Lithium and compounds | Batteries ("coin" or "button" cells) |  |
| Silver (Ag) | Solder, components |  |
| Carbon (C) | Batteries, components |  |
| Cadmium (Cd) | Batteries, components | Y26,  H6.1, H11, A1010, A1020, A1170, A1180 |
| Chromium | Case, frame | Y17, Y21  H11, H12, A1040 |
| **Micro or Trace Constituents** | **(typically less than 0.01%)** |  |
| Titanium (Ti) and compounds | Circuit board, components |  |
| Paper | Components |  |
| Tantalum (Ta) and compounds | Components |  |
| Neodymium (Nd) | Components |  |
| Zinc Oxide (ZnO) | Components | Y23 |
| Gold (Au) | Components |  |
| Oil/lubricants | Fan | Y8, Y9  H3, H6.1  A3020, A4060 |
| Calcium carbonate (CaCO3) | Components |  |
| Talc | Components |  |
| Gallium Arsenide (As) | LED indicator lights | Y24  H11, H6.1  A1030 |
| Magnesium (Mg) | Components |  |
| Selenium (Se) | Components | Y25  H11, H12, H6.1  A1010, A1020 |
| Palladium (Pd) | Components |  |
| Vanadium (V) | Components |  |
| Tungsten (W) | Components |  |

1) Iron/steel alloys may contain a wide variety of elements, such as Cr, C, Ni, Co, C, Si and Mn.

2) Plastics may contain a wide variety of additives including plasticizers, flame retardants. etc.

| **Table 2: Laptop Computers** | | |
| --- | --- | --- |
| **Primary Constituents:** | **Location in Device** | **Basel Annex Listings** |
| Plastics1 | Case, circuit board, connectors, wire insulation etc. | Y13  A3050 |
| Iron (Fe) steel and other compounds2 | Case, frame, charger, batteries |  |
| Glass/ceramic/semiconductor | Display, components, circuit board, connectors |  |
| Copper (Cu) and compounds (including brass) | Circuit board, wires, connectors, batteries, heatsinks | Y22 |
| Aluminum (Al)3 | Batteries |  |
| Lithium (Li) and Compounds | Batteries |  |
| Cadmium | Batteries | Y26,  H6.1, H11, A1010, A1020, A1170, A1180 |
| Cobalt | Batteries |  |
| Flame retardants | Circuit board, components, structural plastics | Y13, Y45, Y37  H11, A3050 |
| Liquids (organic solvents and water) | Batteries, capacitors | Y41, Y42  H3, H6.1, A3150, A3140 |
| Nickel (Ni) and Compounds | Components |  |
| Tin | Solder, components |  |
| Lead (Pb) | Solder, components | Y31  H6.1, H11, H12, A1010, A1020, A1180 |
| Poly Vinyl Chloride (PVC) | Wires and cable | Y45 A3050 |
| **Minor Constituents** | **(typically less than 0.1%)** |  |
| Silver (Ag) | Solder |  |
|  |  |  |
| Beryllium (Be) | Connectors | Y20,  H11, H6.1, A1010, A1020, |
| Chromium | Case, frame | Y17, Y21  H11, H12, A1040 |
| **Micro or Trace Constituents** | **(typically less than 0.01%)** |  |
| Tantalum (Ta) and compounds | Components |  |
| Mercury (Hg) | LCD screen backlights | Y29  H6.1, H11, H12  A1030 |
| Liquid crystal polymer | LCD screen |  |
| Gold (Au) | Connectors, components |  |
| Fluorine (F) and compounds | Components, circuit board | Y32, Y41, Y45,  H6.1, H12  A2020, A3150, |
| Titanium (Ti) and compounds | Circuit board, components |  |
| Calcium carbonate (CaCO3) | Components |  |
| Talc | Components |  |
| Oil/lubricants | Fan | Y8, Y9  H3, H6.1  A3020, A4060 |
| Lead oxide (PbO) | Components | Y31  H6.1, H11, H12  A1020 |
| Paper | Components |  |
| Indium tin oxide (ITO) | Display |  |
| Gallium  Arsenide | LED indicator lights | Y24  H11, H6.1  A1030 |
| Palladium (Pd) | Components |  |
| Magnesium (Mn) | Components |  |
| Tungsten (W) | Components |  |
| Germanium (Ge) | Components |  |
| Vanadium (V) | Components |  |
| Selenium | Components | Y25  H11, H12, H6.1  A1010, A1020 |

1) Plastics may contain a wide variety of additives, including plasticizers, flame retardants, etc.

2) Iron alloys may contain a wide variety of elements, such as Cr, C, Ni, Co, C, Si and Mn.

3) Percentage of Al (or magnesium in some cases) will be much higher

| **Table 3: Displays (CRT,LCD, Plasma)** | | |
| --- | --- | --- |
| **Primary Constituents:** | **Location in Device** | **Basel Annex Listings** |
| Iron (Fe) and compounds1 | Case, components |  |
| Lead (Pb) | CRT glass, solder, plasma screen glass | Y31  H6.1, H11, H12, A1010, A1020, A1180, A2010 |
| Plastics2 | Case, circuit board, connectors, components | Y13  A3050 |
| Glass/ceramic/semiconductor | Circuit board, components |  |
| Copper (Cu) and compounds | Circuit board, wires, connectors | Y22 |
| Flame retardants | Circuit board, components, structural plastics | Y13, Y45, Y37  H11, A3050 |
| Poly Vinyl Chloride (PVC) | Wire and cable | Y45 A3050 |
| Aluminum (Al) | Heatsinks, components |  |
| Barium Oxide | CRT glass |  |
| **Minor Constituents** | **(typically less than 1%, more than 0.1%)** |  |
| Paper | Circuit board, components |  |
| Nickel (Ni) and Compounds | Components, fasteners |  |
| Tin (Sn) | Solder, components |  |
| Carbon | Components |  |
| Liquid crystal polymer | LCD screen |  |
|  |  |  |
| **Micro or Trace Constituents** | **(typically less than 0.1%)** |  |
| Liquids (organic solvents and water) | Components, capacitors | Y41, Y42  H3, H6.1, A3150, A3140 |
| Mercury (Hg) | LCD screen backlights | Y29  H6.1, H11, H12  A1030 |
| Cadmium (Cd) | LCD screen phosphor | Y26,  H6.1, H11, A1010, A1020, A1170, A1180 |
| Zinc oxide (ZnO) | Components | Y23 |
| Silver (Ag) | Solder, components |  |
| Tantalum (Ta) and compounds | Components |  |
| Lead oxide (PbO) | Components | Y31  H6.1, H11, H12  A1020 |
| Titanium (Ti) and compounds | Circuit board, components |  |
| Gallium Arsenide | LED indicator lights | Y24  H11, H6.1  A1030 |
| Gold (Au) | Connectors, components |  |
| Calcium carbonate (CaCO3) | Components |  |
| Talc | Components |  |
| Indium tin oxide (ITO) | Display |  |
| Palladium (Pd) | Components |  |
| Tungsten (W) | Components |  |
| Europium, Yttrium and other rare earth metals | Phosphor | A2010 |
| Zinc Sulfide | Phosphor | Y23 |
| 1. Iron alloys may contain a wide variety of elements, such as Cr, C, Ni, Co, C, Si and Mn. 2. Plastics may contain a wide variety of additives, including plasticizers, flame retardants, etc. | |

# Appendix III Correlation between the Harmonized System Codes and Basel Convention lists

The Secretariat of the Basel Convention has cooperated with the World Customs Organisation (WCO) to establish a correlation between the entries in Annexes VIII and IX of the Convention and the Harmonized Commodity Description and Coding System (normally referred to as “Harmonized System” further HS). The HS provides for a nomenclature of goods used by all customs organizations. This system is used by exporters to in documentation required by custom authorities throughout the world. The system uses 6-digit codes and descriptions of goods. Also wastes are included in the system.

The WCO prepared a document in which the correlation between relevant HS codes and the Annexes VIII and IX were established for the following entries of Annex VIII:

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.

It also contains the correlation with the following entries of Annex IX:

B1040 Scrap assemblies from electrical power generation not contaminated with lubricating oil, PCB or PCT to an extent to render them hazardous.

B1090 Waste batteries conforming to a specification, excluding those made with lead, cadmium or mercury

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 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 reuse, and not for recycling or final disposal[[23]](#footnote-23).

The correlation table (see below) lists the different HS codes and indicates if the relevant HS code only consists of waste (indicated with the symbol X) or also may consist of both wastes and of products that are not waste (indicated with the symbol EX). It is also indicated if the material covered by the HS code would be included in List A, List B or both. This correlation table may be useful for enforcement agencies undertaking controls of used equipment and e-waste when checking customs documents or CMR documents. These make use of the HS codes to describe the goods that are transported and generally do not make reference to the waste codes of the Convention. The table may give indications when movements indicated with certain HS codes could constitute waste and in which cases this could be hazardous waste. Such cases could be then be selected for further inspection.

**Correlation table between HS codes and entries in Annexes VIII and IV of the Basel Convention**

**Note:** This table was last reviewed in 2008 and will be applicable until end 2011. From 1 January 2012 the HS Nomenclature 2012 will come into effect. A correspondence table compatible with this new version of the HS Nomenclature will become available before that date. That correspondence table will be added in a later version of the document.

| HS Code | WASTE on Annex VIII | WASTE on Annex IX |
| --- | --- | --- |
| 0501.00 |  | EX |
| 0502.10 |  | EX |
| 0502.90 |  | EX |
| 0505.90 |  | EX |
| 0506.90 |  | EX |
| 0507.10 |  | EX |
| 0507.90 |  | EX |
| 0508.00 |  | EX |
| 0511.99 | EX | EX |
| 1213.00 |  | EX |
| 1404.90 |  | EX |
| 1501.00 |  | EX |
| 1502.00 |  | EX |
| 1503.00 |  | EX |
| 1505.00 |  | EX |
| 1506.00 |  | EX |
| 15.07 |  | EX |
| 15.08 |  | EX |
| 15.09 |  | EX |
| 1510.00 |  | EX |
| 15.11 |  | EX |
| 15.12 |  | EX |
| 15.13 |  | EX |
| 15.14 |  | EX |
| 15.15 |  | EX |
| 15.16 |  | EX |
| 15.17 |  | EX |
| 1518.00 |  | EX |
| 1520.00 |  | EX |
| 1522.00 |  | X |
| 1802.00 |  | EX |
| 2303.20 |  | EX |
| 2303.30 |  | X |
| 2307.00 |  | EX |
| 2308.00 |  | EX |
| 2501.00 |  | EX |
| 2503.00 |  | EX |
| 2504.90 |  | EX |
| 2505.10 |  | EX |
| 2505.90 |  | EX |
| 2514.00 |  | EX |
| 2517.20 |  | EX |
| 2521.00 |  | EX |
| 2524.10 | X |  |
| 2524.90 | X |  |
| 2525.30 |  | X |
| 2529.10 |  | EX |
| 2529.21 |  | EX |
| 2529.30 |  | EX |
| 2530.90 |  | EX |
| 2618.00 |  | X |
| 2619.00 |  | X |
| 2620.11 |  | X |
| 2620.19 | X | EX |
| 2620.21 | X | X |
| 2620.29 | X | EX |
| 2620.30 | X | EX |
| 2620.40 | X | EX |
| 2620.60 | X | EX |
| 2620.91 | X | EX |
| 2620.99 | X | EX |
| 2621.10 | X | EX |
| 2621.90 | X | EX |
| 2706.00 | EX | EX |
| 27.07 | EX | EX |
| 2708.10 | EX | EX |
| 2708.20 | EX | EX |
| 2709.00 | EX | EX |
| 2710.19 |  | EX |
| 2710.91 | X |  |
| 2710.99 | X |  |
| 2713.90 | X | EX |
| 2715.00 |  | EX |
| 2804.50 | EX | EX |
| 2804.80 | EX | EX |
| 2804.90 | EX | EX |
| 2805.40 | X | X |
| 2827.35 |  | EX |
| 2827.39 |  | EX |
| 2827.49 |  | EX |
| 2841.50 | EX | EX |
| 2846.90 |  | EX |
| 2849.10 |  | EX |
| 2849.20 |  | EX |
| 2852.00 | X | EX |
| 3006.92 | X |  |
| 3104.20 |  | EX |
| 3203.00 |  | EX |
| 3204.17 | EX | EX |
| 3604.90 | EX |  |
| 3808.50 | X |  |
| 3808.91 | X |  |
| 3808.92 | X |  |
| 3808.93 | X |  |
| 3808.94 | X |  |
| 3808.99 | X |  |
| 3824.10 | EX |  |
| 3824.30 | EX |  |
| 3824.40 | EX |  |
| 3824.50 | EX |  |
| 3824.60 | EX |  |
| 3824.71 | X |  |
| 3824.72 | X |  |
| 3824.73 | X |  |
| 3824.74 | X |  |
| 3824.75 | X |  |
| 3824.76 | X |  |
| 3824.77 | X |  |
| 3824.78 | X |  |
| 3824.79 | X |  |
| 3824.81 | X |  |
| 3824.82 | X |  |
| 3824.83 | X |  |
| 3824.90 | X |  |
| 3825.10 | X | EX |
| 3825.20 | X | EX |
| 3825.30 |  | EX |
| 3825.41 |  | EX |
| 3825.49 |  | EX |
| 3825.50 |  | EX |
| 3825.61 | X | X |
| 3825.69 | X | X |
| 3825.90 | X | EX |
| 3905.19 |  | EX |
| 3905.30 |  | EX |
| 3905.99 |  | EX |
| 3906.10 |  | EX |
| 3906.90 |  | EX |
| 3907.10 |  | EX |
| 3907.20 |  | EX |
| 3907.30 |  | EX |
| 3907.40 |  | EX |
| 3907.50 |  | EX |
| 3907.60 |  | EX |
| 3907.70 |  | EX |
| 3907.91 |  | EX |
| 3907.99 |  | EX |
| 3908.10 |  | EX |
| 3908.90 |  | EX |
| 3909.10 |  | EX |
| 3909.20 |  | EX |
| 3909.30 |  | EX |
| 3909.40 |  | EX |
| 3909.50 |  | EX |
| 3915.10 |  | X |
| 3915.20 |  | X |
| 3915.30 |  | X |
| 3915.90 |  | X |
| 3918.10 |  | EX |
| 3918.90 |  | EX |
| 4004.00 |  | EX |
| 4012.20 |  | X |
| 4017.00 |  | EX |
| 4115.20 | X | EX |
| 4401.30 |  | EX |
| 4501.90 |  | EX |
| 4706.20 |  | EX |
| 4707.10 |  | EX |
| 4707.20 |  | EX |
| 4707.30 |  | EX |
| 4707.90 | X | EX |
| 5003.00 |  | EX |
| 5007.20 |  | EX |
| 5103.10 |  | EX |
| 5103.20 |  | EX |
| 5103.30 |  | EX |
| 5202.10 |  | EX |
| 5202.91 |  | EX |
| 5202.99 |  | EX |
| 5301.30 |  | EX |
| 5302.90 |  | EX |
| 5303.90 |  | EX |
| 5305.00 |  | EX |
| 5505.10 |  | EX |
| 5505.20 |  | EX |
| 57.01 |  | EX |
| 57.02 |  | EX |
| 57.03 |  | EX |
| 57.04 |  | EX |
| 5705.00 |  | EX |
| 6309.00 |  | X |
| 6310.10 |  | X |
| 6310.90 |  | X |
| 6806.90 |  | EX |
| 6809.11 |  | EX |
| 6809.19 |  | EX |
| 6809.90 |  | EX |
| 6811.40 | X |  |
| 6903.90 |  | EX |
| 6909 |  | EX |
| 7001.00 | EX | EX |
| 7112.30 | X | EX |
| 7112.91 |  | EX |
| 7112.92 |  | EX |
| 7112.99 |  | EX |
| 7204.10 |  | EX |
| 7204.21 |  | EX |
| 7204.29 |  | EX |
| 7204.30 |  | EX |
| 7204.41 |  | EX |
| 7204.49 |  | EX |
| 7204.50 |  | EX |
| 7404.00 |  | X |
| 7503.00 |  | X |
| 7602.00 |  | X |
| 7802.00 | X | X |
| 7902.00 |  | EX |
| 8002.00 |  | EX |
| 8101.10 |  | X |
| 8101.97 |  | EX |
| 8102.10 |  | X |
| 8102.97 |  | EX |
| 8103.20 |  | EX |
| 8103.30 |  | EX |
| 8103.90 |  | EX |
| 8104.20 |  | X |
| 8105.30 |  | EX |
| 8106.00 |  | EX |
| 8107.30 | X | X |
| 8108.20 |  | EX |
| 8108.30 |  | EX |
| 8109.20 | X |  |
| 8109.30 |  | X |
| 8110.10 | X |  |
| 8110.20 | X | X |
| 8111.00 |  | EX |
| 8112.12 | X | X |
| 8112.13 | X | X |
| 8112.22 |  | EX |
| 8112.52 | X | X |
| 8112.92 | X | X |
| 8113.00 |  | EX |
| 8401.40 | EX | EX |
| 8402.90 | EX | EX |
| 8403.90 | EX | EX |
| 8404.90 | EX | EX |
| 8405.90 | EX | EX |
| 8409.10 | EX | EX |
| 8409.91 | EX | EX |
| 8409.99 | EX | EX |
| 8410.90 | EX | EX |
| 8411.91 | EX | EX |
| 8411.99 | EX | EX |
| 8412.90 | EX | EX |
| 8413.11 | EX | EX |
| 8413.19 | EX | EX |
| 8413.30 | EX | EX |
| 8413.40 | EX | EX |
| 8413.50 | EX | EX |
| 8413.60 | EX | EX |
| 8413.70 | EX | EX |
| 8413.81 | EX | EX |
| 8413.82 | EX | EX |
| 8413.91 | EX | EX |
| 8413.92 | EX | EX |
| 8414.10 | EX | EX |
| 8414.30 | EX | EX |
| 8414.40 | EX | EX |
| 8414.51 | EX | EX |
| 8414.59 | EX | EX |
| 8414.60 | EX | EX |
| 8414.80 | EX | EX |
| 8414.90 | EX | EX |
| 8415.10 | EX | EX |
| 8415.20 | EX | EX |
| 8415.81 | EX | EX |
| 8415.82 | EX | EX |
| 8415.83 | EX | EX |
| 8415.90 | EX | EX |
| 8416.10 | EX | EX |
| 8416.20 | EX | EX |
| 8416.30 | EX | EX |
| 8416.90 | EX | EX |
| 8417.10 | EX | EX |
| 8417.20 | EX | EX |
| 8417.80 | EX | EX |
| 8417.90 | EX | EX |
| 8418.10 | EX | EX |
| 8418.21 | EX | EX |
| 8418.29 | EX | EX |
| 8418.30 | EX | EX |
| 8418.40 | EX | EX |
| 8418.50 | EX | EX |
| 8418.61 | EX | EX |
| 8418.69 | EX | EX |
| 8418.99 | EX | EX |
| 8419.20 | EX | EX |
| 8419.31 | EX | EX |
| 8419.32 | EX | EX |
| 8419.39 | EX | EX |
| 8419.40 | EX | EX |
| 8419.81 | EX | EX |
| 8419.89 | EX | EX |
| 8419.90 | EX | EX |
| 8420.10 | EX | EX |
| 8420.91 | EX | EX |
| 8420.99 | EX | EX |
| 8421.11 | EX | EX |
| 8421.12 | EX | EX |
| 8421.19 | EX | EX |
| 8421.21 | EX | EX |
| 8421.22 | EX | EX |
| 8421.23 | EX | EX |
| 8421.29 | EX | EX |
| 8421.39 | EX | EX |
| 8421.91 | EX | EX |
| 8421.99 | EX | EX |
| 8422.11 | EX | EX |
| 8422.19 | EX | EX |
| 8422.20 | EX | EX |
| 8422.30 | EX | EX |
| 8422.40 | EX | EX |
| 8422.90 | EX | EX |
| 8423.10 | EX | EX |
| 8423.20 | EX | EX |
| 8423.30 | EX | EX |
| 8423.81 | EX | EX |
| 8423.82 | EX | EX |
| 8423.89 | EX | EX |
| 8423.90 | EX | EX |
| 8424.10 | EX | EX |
| 8424.20 | EX | EX |
| 8424.30 | EX | EX |
| 8424.81 | EX | EX |
| 8424.89 | EX | EX |
| 8424.90 | EX | EX |
| 8425.11 | EX | EX |
| 8425.31 | EX | EX |
| 8425.41 | EX | EX |
| 8425.42 | EX | EX |
| 8425.49 | EX | EX |
| 8426.11 | EX | EX |
| 8426.12 | EX | EX |
| 8426.19 | EX | EX |
| 8426.20 | EX | EX |
| 8426.30 | EX | EX |
| 8426.41 | EX | EX |
| 8426.49 | EX | EX |
| 8426.91 | EX | EX |
| 8426.99 | EX | EX |
| 8427.10 | EX | EX |
| 8427.20 | EX | EX |
| 8427.90 | EX | EX |
| 8428.10 | EX | EX |
| 8428.20 | EX | EX |
| 8428.31 | EX | EX |
| 8428.32 | EX | EX |
| 8428.33 | EX | EX |
| 8428.39 | EX | EX |
| 8428.40 | EX | EX |
| 8428.60 | EX | EX |
| 8428.90 | EX | EX |
| 8429.11 | EX | EX |
| 8429.19 | EX | EX |
| 8429.20 | EX | EX |
| 8429.30 | EX | EX |
| 8429.40 | EX | EX |
| 8429.51 | EX | EX |
| 8429.52 | EX | EX |
| 8429.59 | EX | EX |
| 8430.10 | EX | EX |
| 8430.20 | EX | EX |
| 8430.31 | EX | EX |
| 8430.39 | EX | EX |
| 8430.41 | EX | EX |
| 8430.49 | EX | EX |
| 8430.50 | EX | EX |
| 8430.61 | EX | EX |
| 8430.69 | EX | EX |
| 8431.10 | EX | EX |
| 8431.20 | EX | EX |
| 8431.31 | EX | EX |
| 8431.39 | EX | EX |
| 8431.43 | EX | EX |
| 8431.49 | EX | EX |
| 8432.21 | EX | EX |
| 8432.29 | EX | EX |
| 8432.30 | EX | EX |
| 8432.40 | EX | EX |
| 8432.80 | EX | EX |
| 8432.90 | EX | EX |
| 8433.11 | EX | EX |
| 8433.19 | EX | EX |
| 8433.20 | EX | EX |
| 8433.30 | EX | EX |
| 8433.40 | EX | EX |
| 8433.51 | EX | EX |
| 8433.52 | EX | EX |
| 8433.53 | EX | EX |
| 8433.59 | EX | EX |
| 8433.60 | EX | EX |
| 8433.90 | EX | EX |
| 8434.10 | EX | EX |
| 8434.20 | EX | EX |
| 8434.90 | EX | EX |
| 8435.10 | EX | EX |
| 8435.90 | EX | EX |
| 8436.10 | EX | EX |
| 8436.21 | EX | EX |
| 8436.29 | EX | EX |
| 8436.80 | EX | EX |
| 8436.91 | EX | EX |
| 8436.99 | EX | EX |
| 8437.10 | EX | EX |
| 8437.80 | EX | EX |
| 8437.90 | EX | EX |
| 8438.10 | EX | EX |
| 8438.20 | EX | EX |
| 8438.30 | EX | EX |
| 8438.40 | EX | EX |
| 8438.50 | EX | EX |
| 8438.60 | EX | EX |
| 8438.80 | EX | EX |
| 8438.90 | EX | EX |
| 8439.10 | EX | EX |
| 8439.20 | EX | EX |
| 8439.30 | EX | EX |
| 8439.91 | EX | EX |
| 8439.99 | EX | EX |
| 8440.10 | EX | EX |
| 8440.90 | EX | EX |
| 8441.10 | EX | EX |
| 8441.20 | EX | EX |
| 8441.30 | EX | EX |
| 8441.40 | EX | EX |
| 8441.80 | EX | EX |
| 8441.90 | EX | EX |
| 8442.30 | EX | EX |
| 8442.40 | EX | EX |
| 8442.50 | EX | EX |
| 8443.11 | EX | EX |
| 8443.12 | EX | EX |
| 8443.13 | EX | EX |
| 8443.14 | EX | EX |
| 8443.15 | EX | EX |
| 8443.16 | EX | EX |
| 8443.17 | EX | EX |
| 8443.19 | EX | EX |
| 8443.31 | EX | EX |
| 8443.32 | EX | EX |
| 8443.39 | EX | EX |
| 8443.91 | EX | EX |
| 8443.99 | EX | EX |
| 8444.00 | EX | EX |
| 8445.11 | EX | EX |
| 8445.12 | EX | EX |
| 8445.19 | EX | EX |
| 8445.20 | EX | EX |
| 8445.30 | EX | EX |
| 8445.40 | EX | EX |
| 8445.90 | EX | EX |
| 8446.10 | EX | EX |
| 8446.13 | EX | EX |
| 8446.21 | EX | EX |
| 8446.29 | EX | EX |
| 8446.30 | EX | EX |
| 8447.11 | EX | EX |
| 8447.12 | EX | EX |
| 8447.20 | EX | EX |
| 8447.90 | EX | EX |
| 8448.11 | EX | EX |
| 8448.19 | EX | EX |
| 8448.20 | EX | EX |
| 8448.32 | EX | EX |
| 8448.39 | EX | EX |
| 8448.49 | EX | EX |
| 8448.59 | EX | EX |
| 8449.00 | EX | EX |
| 8450.11 | EX | EX |
| 8450.12 | EX | EX |
| 8450.19 | EX | EX |
| 8450.20 | EX | EX |
| 8450.90 | EX | EX |
| 8451.10 | EX | EX |
| 8451.21 | EX | EX |
| 8451.29 | EX | EX |
| 8451.30 | EX | EX |
| 8451.40 | EX | EX |
| 8451.50 | EX | EX |
| 8451.80 | EX | EX |
| 8451.90 | EX | EX |
| 8452.10 | EX | EX |
| 8452.21 | EX | EX |
| 8452.29 | EX | EX |
| 8452.90 | EX | EX |
| 8453.10 | EX | EX |
| 8453.20 | EX | EX |
| 8453.80 | EX | EX |
| 8453.90 | EX | EX |
| 8454.10 | EX | EX |
| 8454.20 | EX | EX |
| 8454.30 | EX | EX |
| 8454.90 | EX | EX |
| 8455.10 | EX | EX |
| 8455.21 | EX | EX |
| 8455.22 | EX | EX |
| 8455.30 | EX | EX |
| 8455.90 | EX | EX |
| 8456.10 | EX | EX |
| 8456.20 | EX | EX |
| 8456.30 | EX | EX |
| 8456.90 | EX | EX |
| 8457.10 | EX | EX |
| 8457.20 | EX | EX |
| 8457.30 | EX | EX |
| 8458.11 | EX | EX |
| 8458.19 | EX | EX |
| 8458.91 | EX | EX |
| 8458.99 | EX | EX |
| 8459.10 | EX | EX |
| 8459.21 | EX | EX |
| 8459.29 | EX | EX |
| 8459.31 | EX | EX |
| 8459.39 | EX | EX |
| 8459.40 | EX | EX |
| 8459.51 | EX | EX |
| 8459.59 | EX | EX |
| 8459.61 | EX | EX |
| 8459.69 | EX | EX |
| 8459.70 | EX | EX |
| 8460.11 | EX | EX |
| 8460.19 | EX | EX |
| 8460.21 | EX | EX |
| 8460.29 | EX | EX |
| 8460.31 | EX | EX |
| 8460.39 | EX | EX |
| 8460.40 | EX | EX |
| 8460.90 | EX | EX |
| 8461.20 | EX | EX |
| 8461.30 | EX | EX |
| 8461.40 | EX | EX |
| 8461.50 | EX | EX |
| 8461.90 | EX | EX |
| 8462.10 | EX | EX |
| 8462.21 | EX | EX |
| 8462.29 | EX | EX |
| 8462.31 | EX | EX |
| 8462.39 | EX | EX |
| 8462.41 | EX | EX |
| 8462.49 | EX | EX |
| 8462.91 | EX | EX |
| 8462.99 | EX | EX |
| 8463.10 | EX | EX |
| 8463.20 | EX | EX |
| 8463.30 | EX | EX |
| 8463.90 | EX | EX |
| 8464.10 | EX | EX |
| 8464.20 | EX | EX |
| 8464.90 | EX | EX |
| 8465.10 | EX | EX |
| 8465.91 | EX | EX |
| 8465.92 | EX | EX |
| 8465.93 | EX | EX |
| 8465.94 | EX | EX |
| 8465.95 | EX | EX |
| 8465.96 | EX | EX |
| 8465.99 | EX | EX |
| 8466.91 | EX | EX |
| 8466.92 | EX | EX |
| 8466.93 | EX | EX |
| 8466.94 | EX | EX |
| 8467.21 | EX | EX |
| 8467.22 | EX | EX |
| 8467.29 | EX | EX |
| 8467.81 | EX | EX |
| 8467.89 | EX | EX |
| 8467.91 | EX | EX |
| 8467.99 | EX | EX |
| 8468.80 | EX | EX |
| 8468.90 | EX | EX |
| 8469.00 | EX | EX |
| 8470.10 | EX | EX |
| 8470.21 | EX | EX |
| 8470.29 | EX | EX |
| 8470.30 | EX | EX |
| 8470.50 | EX | EX |
| 8470.90 | EX | EX |
| 8471.30 | EX | EX |
| 8471.41 | EX | EX |
| 8471.49 | EX | EX |
| 8471.50 | EX | EX |
| 8471.60 | EX | EX |
| 8471.70 | EX | EX |
| 8471.80 | EX | EX |
| 8471.90 | EX | EX |
| 8472.10 | EX | EX |
| 8472.30 | EX | EX |
| 8472.90 | EX | EX |
| 8473.10 | EX | EX |
| 8473.21 | EX | EX |
| 8473.29 | EX | EX |
| 8473.30 | EX | EX |
| 8473.40 | EX | EX |
| 8473.50 | EX | EX |
| 8474.10 | EX | EX |
| 8474.20 | EX | EX |
| 8474.31 | EX | EX |
| 8474.32 | EX | EX |
| 8474.39 | EX | EX |
| 8474.80 | EX | EX |
| 8474.90 | EX | EX |
| 8475.10 | EX | EX |
| 8475.21 | EX | EX |
| 8475.29 | EX | EX |
| 8475.90 | EX | EX |
| 8476.21 | EX | EX |
| 8476.29 | EX | EX |
| 8476.81 | EX | EX |
| 8476.89 | EX | EX |
| 8476.90 | EX | EX |
| 8477.10 | EX | EX |
| 8477.20 | EX | EX |
| 8477.30 | EX | EX |
| 8477.40 | EX | EX |
| 8477.51 | EX | EX |
| 8477.59 | EX | EX |
| 8477.80 | EX | EX |
| 8477.90 | EX | EX |
| 8478.10 | EX | EX |
| 8478.90 | EX | EX |
| 8479.10 | EX | EX |
| 8479.20 | EX | EX |
| 8479.30 | EX | EX |
| 8479.40 | EX | EX |
| 8479.50 | EX | EX |
| 8479.60 | EX | EX |
| 8479.81 | EX | EX |
| 8479.82 | EX | EX |
| 8479.89 | EX | EX |
| 8479.90 | EX | EX |
| 8481.10 | EX | EX |
| 8481.20 | EX | EX |
| 8481.30 | EX | EX |
| 8481.40 | EX | EX |
| 8481.80 | EX | EX |
| 8481.90 | EX | EX |
| 8484.10 | EX | EX |
| 8484.20 | EX | EX |
| 8484.90 | EX | EX |
| 8486.10 | EX | EX |
| 8486.20 | EX | EX |
| 8486.30 | EX | EX |
| 8486.40 | EX | EX |
| 8486.90 | EX | EX |
| 8501.10 | EX | EX |
| 8501.20 | EX | EX |
| 8501.31 | EX | EX |
| 8501.32 | EX | EX |
| 8501.33 | EX | EX |
| 8501.34 | EX | EX |
| 8501.40 | EX | EX |
| 8501.51 | EX | EX |
| 8501.52 | EX | EX |
| 8501.53 | EX | EX |
| 8501.61 | EX | EX |
| 8501.62 | EX | EX |
| 8501.63 | EX | EX |
| 8501.64 | EX | EX |
| 8502.11 | EX | EX |
| 8502.12 | EX | EX |
| 8502.13 | EX | EX |
| 8502.20 | EX | EX |
| 8502.31 | EX | EX |
| 8502.39 | EX | EX |
| 8502.40 | EX | EX |
| 8503.00 | EX | EX |
| 8504.10 | EX | EX |
| 8504.21 | EX | EX |
| 8504.22 | EX | EX |
| 8504.23 | EX | EX |
| 8504.31 | EX | EX |
| 8504.32 | EX | EX |
| 8504.33 | EX | EX |
| 8504.34 | EX | EX |
| 8504.40 | EX | EX |
| 8504.50 | EX | EX |
| 8504.90 | EX | EX |
| 8505.20 | EX | EX |
| 8505.90 | EX | EX |
| 8508.11 | EX | EX |
| 8508.19 | EX | EX |
| 8508.70 | EX | EX |
| 8509.40 | EX | EX |
| 8509.80 | EX | EX |
| 8509.90 | EX | EX |
| 8510.10 | EX | EX |
| 8510.20 | EX | EX |
| 8510.30 | EX | EX |
| 8510.90 | EX | EX |
| 8511.10 |  | EX |
| 8511.20 | EX | EX |
| 8511.30 | EX | EX |
| 8511.40 | EX | EX |
| 8511.50 | EX | EX |
| 8511.80 | EX | EX |
| 8511.90 | EX | EX |
| 8512.10 | EX | EX |
| 8512.20 | EX | EX |
| 8512.30 | EX | EX |
| 8512.40 | EX | EX |
| 8512.90 | EX | EX |
| 8513.10 | EX | EX |
| 8513.90 | EX | EX |
| 8514.10 | EX | EX |
| 8514.20 | EX | EX |
| 8514.30 | EX | EX |
| 8514.40 | EX | EX |
| 8514.90 | EX | EX |
| 8515.11 | EX | EX |
| 8515.19 | EX | EX |
| 8515.21 | EX | EX |
| 8515.29 | EX | EX |
| 8515.31 | EX | EX |
| 8515.39 | EX | EX |
| 8515.80 | EX | EX |
| 8515.90 | EX | EX |
| 8516.10 | EX | EX |
| 8516.21 | EX | EX |
| 8516.29 | EX | EX |
| 8516.31 | EX | EX |
| 8516.32 | EX | EX |
| 8516.33 | EX | EX |
| 8516.40 | EX | EX |
| 8516.50 | EX | EX |
| 8516.60 | EX | EX |
| 8516.71 | EX | EX |
| 8516.72 | EX | EX |
| 8516.79 | EX | EX |
| 8516.80 | EX | EX |
| 8516.90 | EX | EX |
| 8517.11 | EX | EX |
| 8517.12 | EX | EX |
| 8517.18 | EX | EX |
| 8517.61 | EX | EX |
| 8517.62 | EX | EX |
| 8517.69 | EX | EX |
| 8517.70 | EX | EX |
| 8518.10 | EX | EX |
| 8518.21 | EX | EX |
| 8518.22 | EX | EX |
| 8518.29 | EX | EX |
| 8518.30 | EX | EX |
| 8518.40 | EX | EX |
| 8518.50 | EX | EX |
| 8518.90 | EX | EX |
| 8519.20 | EX | EX |
| 8519.30 | EX | EX |
| 8519.50 | EX | EX |
| 8519.81 | EX | EX |
| 8519.89 | EX | EX |
| 8521.10 | EX | EX |
| 8521.90 | EX | EX |
| 8522.10 | EX | EX |
| 8522.90 | EX | EX |
| 8523.51 |  | EX |
| 8523.52 |  | EX |
| 8523.59 |  | EX |
| 8525.50 | EX | EX |
| 8525.60 | EX | EX |
| 8525.80 | EX | EX |
| 8526.10 | EX | EX |
| 8526.91 | EX | EX |
| 8526.92 | EX | EX |
| 8527.12 | EX | EX |
| 8527.13 | EX | EX |
| 8527.19 | EX | EX |
| 8527.21 | EX | EX |
| 8527.29 | EX | EX |
| 8527.91 | EX | EX |
| 8527.92 | EX | EX |
| 8527.99 | EX | EX |
| 8528.41 | EX | EX |
| 8528.49 | EX | EX |
| 8528.51 | EX | EX |
| 8528.59 | EX | EX |
| 8528.61 | EX | EX |
| 8528.69 | EX | EX |
| 8528.71 | EX | EX |
| 8528.72 | EX | EX |
| 8528.73 | EX | EX |
| 8529.10 | EX | EX |
| 8529.90 | EX | EX |
| 8530.10 | EX | EX |
| 8530.80 | EX | EX |
| 8530.90 | EX | EX |
| 8531.10 | EX | EX |
| 8531.20 | EX | EX |
| 8531.80 | EX | EX |
| 8531.90 | EX | EX |
| 8532.10 | EX | EX |
| 8532.21 | EX | EX |
| 8532.22 | EX | EX |
| 8532.23 | EX | EX |
| 8532.24 | EX | EX |
| 8532.25 | EX | EX |
| 8532.29 | EX | EX |
| 8532.30 | EX | EX |
| 8532.90 |  | EX |
| 8533.10 |  | EX |
| 8533.21 |  | EX |
| 8533.29 |  | EX |
| 8533.31 |  | EX |
| 8533.39 |  | EX |
| 8533.40 |  | EX |
| 8533.90 |  | EX |
| 8534.00 | EX | EX |
| 8535.21 | EX | EX |
| 8535.29 | EX | EX |
| 8535.30 | EX | EX |
| 8535.40 | EX | EX |
| 8535.90 | EX | EX |
| 8536.20 | EX | EX |
| 8536.30 | EX | EX |
| 8536.41 | EX | EX |
| 8536.49 | EX | EX |
| 8536.50 | EX | EX |
| 8536.69 |  | EX |
| 8536.90 | EX | EX |
| 8537.10 | EX | EX |
| 8537.20 | EX | EX |
| 8538.90 | EX | EX |
| 8539.21 | EX | EX |
| 8539.22 | EX | EX |
| 8539.29 | EX | EX |
| 8539.31 | X | EX |
| 8539.32 | X | EX |
| 8539.39 | EX | EX |
| 8539.41 | EX | EX |
| 8539.49 | EX | EX |
| 8539.90 | EX | EX |
| 8540.11 | X | EX |
| 8540.12 | X | EX |
| 8540.20 | X | EX |
| 8540.40 | X | EX |
| 8540.50 | X | EX |
| 8540.60 | X | EX |
| 8540.71 | EX | EX |
| 8540.72 | EX | EX |
| 8540.79 | EX | EX |
| 8540.81 | EX | EX |
| 8540.89 | EX | EX |
| 8540.91 | EX | EX |
| 8540.99 | EX | EX |
| 8541.10 |  | EX |
| 8541.21 |  | EX |
| 8541.29 |  | EX |
| 8541.30 |  | EX |
| 8541.40 |  | EX |
| 8541.50 |  | EX |
| 8541.60 |  | EX |
| 8541.90 |  | EX |
| 8542.31 | EX | EX |
| 8542.32 | EX | EX |
| 8542.33 | EX | EX |
| 8542.39 | EX | EX |
| 8542.90 | EX | EX |
| 8543.10 | EX | EX |
| 8543.20 | EX | EX |
| 8543.30 | X | EX |
| 8543.70 | EX | EX |
| 8543.90 | EX | EX |
| 8544.11 | X | EX |
| 8544.19 | X | EX |
| 8544.20 | X | EX |
| 8544.30 | X | EX |
| 8544.42 | EX | EX |
| 8544.49 | EX | EX |
| 8544.60 | EX | EX |
| 8544.70 | EX | EX |
| 8545.20 | X | EX |
| 8546.90 |  | EX |
| 8547.20 |  | EX |
| 8547.90 |  | EX |
| 8548.10 | X | EX |
| 8548.90 | X | EX |
| 8601.10 |  | EX |
| 8601.20 |  | EX |
| 8602.10 |  | EX |
| 8602.90 |  | EX |
| 8603.10 |  | EX |
| 8603.90 |  | EX |
| 8604.00 |  | EX |
| 8605.00 |  | EX |
| 8606.10 | EX | EX |
| 8606.91 | EX | EX |
| 8606.99 | EX | EX |
| 8607.11 | EX | EX |
| 8607.12 | EX | EX |
| 8607.19 | EX | EX |
| 8607.21 | EX | EX |
| 8607.29 | EX | EX |
| 8607.91 |  | EX |
| 8607.99 |  | EX |
| 8608.00 |  | EX |
| 8609.00 | EX | EX |
| 87.01 |  | EX |
| 87.02 |  | EX |
| 87.03 |  | EX |
| 87.04 |  | EX |
| 87.05 |  | EX |
| 8706.00 |  | EX |
| 8707.10 |  | EX |
| 8707.90 |  | EX |
| 8708.10 |  | EX |
| 8708.21 |  | EX |
| 8708.29 |  | EX |
| 8708.30 | X | EX |
| 8708.40 |  | EX |
| 8708.50 |  | EX |
| 8708.70 |  | EX |
| 8708.80 |  | EX |
| 8708.91 |  | EX |
| 8708.92 |  | EX |
| 8708.93 | EX | EX |
| 8708.94 |  | EX |
| 8708.95 | X | EX |
| 8708.99 | EX | EX |
| 87.09 |  | EX |
| 8710.00 |  | EX |
| 87.11 |  | EX |
| 87.13 |  | EX |
| 8714.19 |  | EX |
| 8714.20 |  | EX |
| 8714.99 |  | EX |
| 8716.31 |  | EX |
| 8716.39 |  | EX |
| 8716.40 |  | EX |
| 8716.50 |  | EX |
| 8716.90 |  | EX |
| 8802.11 |  | EX |
| 8802.12 |  | EX |
| 8802.20 |  | EX |
| 8802.30 |  | EX |
| 8802.40 |  | EX |
| 8802.60 |  | EX |
| 8803.20 |  | EX |
| 8803.30 |  | EX |
| 8803.90 |  | EX |
| 8805.10 |  | EX |
| 8805.21 |  | EX |
| 8805.29 |  | EX |
| 9005.10 |  | EX |
| 9005.80 |  | EX |
| 9005.90 |  | EX |
| 9006.10 |  | EX |
| 9006.30 |  | EX |
| 9006.40 |  | EX |
| 9006.51 |  | EX |
| 9006.52 |  | EX |
| 9006.53 |  | EX |
| 9006.59 |  | EX |
| 9006.61 |  | EX |
| 9006.69 |  | EX |
| 9006.91 |  | EX |
| 9006.99 |  | EX |
| 9007.11 |  | EX |
| 9007.19 |  | EX |
| 9007.20 |  | EX |
| 9007.91 |  | EX |
| 9007.92 |  | EX |
| 9008.10 |  | EX |
| 9008.20 |  | EX |
| 9008.30 |  | EX |
| 9008.40 |  | EX |
| 9008.90 |  | EX |
| 9010.10 |  | EX |
| 9010.50 |  | EX |
| 9010.90 |  | EX |
| 9011.10 |  | EX |
| 9011.20 |  | EX |
| 9011.80 |  | EX |
| 9011.90 |  | EX |
| 9012.10 |  | EX |
| 9012.90 |  | EX |
| 9013.20 |  | EX |
| 9013.80 |  | EX |
| 9013.90 |  | EX |
| 9014.10 |  | EX |
| 9014.20 |  | EX |
| 9014.80 |  | EX |
| 9014.90 |  | EX |
| 9015.10 |  | EX |
| 9015.20 |  | EX |
| 9015.30 |  | EX |
| 9015.40 |  | EX |
| 9015.80 |  | EX |
| 9015.90 |  | EX |
| 9016.00 |  | EX |
| 9017.30 |  | EX |
| 9017.90 |  | EX |
| 9018.11 |  | EX |
| 9018.12 |  | EX |
| 9018.13 |  | EX |
| 9018.14 |  | EX |
| 9018.19 |  | EX |
| 9018.20 |  | EX |
| 9018.41 |  | EX |
| 9018.49 |  | EX |
| 9018.50 |  | EX |
| 9018.90 |  | EX |
| 9019.10 |  | EX |
| 9019.20 |  | EX |
| 9021.40 | EX | EX |
| 9021.50 | EX | EX |
| 9021.90 | EX | EX |
| 9022.12 |  | EX |
| 9022.13 |  | EX |
| 9022.14 |  | EX |
| 9022.19 |  | EX |
| 9022.21 |  | EX |
| 9022.29 |  | EX |
| 9022.30 |  | EX |
| 9022.90 |  | EX |
| 9023.00 |  | EX |
| 9024.10 |  | EX |
| 9024.80 |  | EX |
| 9024.90 |  | EX |
| 9025.11 |  | EX |
| 9025.19 | EX | EX |
| 9025.80 | EX | EX |
| 9025.90 | EX | EX |
| 9026.10 |  | EX |
| 9026.20 |  | EX |
| 9026.80 |  | EX |
| 9026.90 |  | EX |
| 9027.10 |  | EX |
| 9027.20 |  | EX |
| 9027.30 |  | EX |
| 9027.50 |  | EX |
| 9027.80 |  | EX |
| 9027.90 |  | EX |
| 9028.10 |  | EX |
| 9028.20 |  | EX |
| 9028.30 |  | EX |
| 9028.90 |  | EX |
| 9029.10 |  | EX |
| 9029.20 |  | EX |
| 9029.90 |  | EX |
| 9030.10 | EX | EX |
| 9030.20 | EX | EX |
| 9030.31 |  | EX |
| 9030.32 |  | EX |
| 9030.33 |  | EX |
| 9030.39 |  | EX |
| 9030.40 |  | EX |
| 9030.82 |  | EX |
| 9030.84 | EX | EX |
| 9030.89 | EX | EX |
| 9030.90 | EX | EX |
| 9031.10 |  | EX |
| 9031.20 |  | EX |
| 9031.41 |  | EX |
| 9031.49 |  | EX |
| 9031.80 | EX | EX |
| 9031.90 |  | EX |
| 9032.10 | EX | EX |
| 9032.20 | EX | EX |
| 9032.81 |  | EX |
| 9032.89 |  | EX |
| 9032.90 |  | EX |
| 9033.00 | EX | EX |
| 9101.11 | EX | EX |
| 9101.19 | EX | EX |
| 9101.91 | EX | EX |
| 9102.11 | EX | EX |
| 9102.12 | EX | EX |
| 9102.19 | EX | EX |
| 9102.91 | EX | EX |
| 9103.10 | EX | EX |
| 9104.00 |  | EX |
| 9105.11 | EX | EX |
| 9105.21 | EX | EX |
| 9105.91 | EX | EX |
| 9106.10 |  | EX |
| 9106.90 |  | EX |
| 9107.00 |  | EX |
| 9108.11 | EX | EX |
| 9108.12 | EX | EX |
| 9108.19 | EX | EX |
| 9109.11 | EX | EX |
| 9109.19 | EX | EX |
| 9110.11 | EX | EX |
| 9110.12 | EX | EX |
| 9110.90 | EX | EX |
| 9114.90 |  | EX |
| 9201.10 |  | EX |
| 9201.20 |  | EX |
| 9201.90 |  | EX |
| 9207.10 | EX | EX |
| 9207.90 | EX | EX |
| 9209.91 |  | EX |
| 9209.94 |  | EX |
| 9401.10 |  | EX |
| 9401.20 |  | EX |
| 9402.10 |  | EX |
| 9402.90 |  | EX |
| 9405.10 |  | EX |
| 9405.20 |  | EX |
| 9405.30 |  | EX |
| 9405.40 |  | EX |
| 9405.60 |  | EX |
| 9406.00 | EX | EX |
| 9503.00 |  | EX |
| 9504.10 | EX | EX |
| 9504.30 |  | EX |
| 9504.90 | EX | EX |
| 9505.10 |  | EX |
| 9505.90 |  | EX |
| 9506.91 |  | EX |
| 9608.10 | EX | EX |
| 9608.50 | EX | EX |
| 9608.60 |  | EX |
| 9613.10 |  | EX |
| 9613.20 |  | EX |
| 9618.00 | EX | EX |

# Annex IV References

Basel Action Network (2002). Exporting harm. The high-tech trashing of Asia.

Basel Convention Mobile Phone Partnership Initiative (MPPI), 2009a. Guideline on the awareness raising – design considerations. Revised and approved text March, 25 2009

Basel Convention Mobile Phone Partnership Initiative (MPPI), 2009b. Guideline on the collection of used mobile phones. Revised and approved text March 25, 2009

Basel Convention Mobile Phone Partnership Initiative (MPPI), 2009c. Guideline for the transboundary movement of collected mobile phones. Revised and approved text March, 25 2009

Basel Convention Mobile Phone Partnership Initiative (MPPI), 2009d. Guideline on the refurbishment of used mobile phones. Revised and approved text March, 25 2009

Basel Convention Mobile Phone Partnership Initiative (MPPI), 2009e. Guideline on material recovery and recycling of end-of-life mobile phones. Revised and approved text March 25, 2009

Basel Convention Partnership on Action for Computing Equipment (PACE) Environmentally Sound Management Criteria Recommendations

Basel Convention Partnership on Action for Computing Equipment (PACE) Guideline on Environmentally Sound Testing, Refurbishment, and Repair of Used Computing Equipment

Basel Convention Partnership on Action for Computing Equipment (PACE) Guideline on Environmentally Sound Material Recovery and Recycling of End-of-Life Computing Equipment

Basel Convention Partnership on Action for Computing Equipment (PACE) Guideline on Transboundary Movement (TBM) of Used and End-of-Life Computing Equipment.

Schmidt (2006). Unfair trade: e-waste in Africa. Environmental Helath Perspectives. Volume 114, number 4.

United Nations Economic Commission for Europe (UNECE), 2009. Recommendations on the transport of dangerous goods

. Model Regulations, sixteenth revised edition.

United Nations University (UNU), 2007. 2008 review of Directive 2002/96 on Waste Electrical and Electronic Equipment.

Yu Xiezhi et al (2008)*.* E-waste recycling heavily contaminates a Chinese City.Organohalogen Compounds, Volume 70.

\_\_\_\_\_\_\_\_\_

1. In this connection, the United Nations Recommendations on the Transport of Dangerous Goods (Model Regulations) (UNECE, 2003a – see annex V, Bibliography) ) or later versions should be used. [↑](#footnote-ref-1)
2. Equipment or components are “fully functional” when they have been tested and demonstrated to be capable of performing the essential key functions they were designed to perform. Essential key functions are the originally-intended function(s) of a unit of equipment or component that will satisfactorily enable the equipment or component to be reused. [↑](#footnote-ref-2)
3. The facilities should apply relevant guidelines for repair and refurbishment facilities. Such guidelines are not yet available under the Convention. Work is being done under the Basel Convention through the Partnership for Action on Computing Equipment (PACE) to produce such guidelines for computing equipment. [↑](#footnote-ref-3)
4. 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. [↑](#footnote-ref-4)
5. Governmental Authority: means a governmental authority designated by a Party or Signatory to be responsible, within such geographical areas under the legal jurisdiction of the Party or Signatory, as the Party or Signatory thinks appropriate for implementing relevant rules and regulations and to receive information related to exports of used equipment destined for reuse, possibly after repair, refurbishment or upgrading. [↑](#footnote-ref-5)
6. For mobile phones the guidance document of the MPPI mentions an indicative number of 200 items. [↑](#footnote-ref-6)
7. It was suggested that third party certification of facilities could provide added assurance to authorities that the proposed exports would meet these requirements. If including such reference is considered to be appropriate this could be added in the next version of the guidelines. [↑](#footnote-ref-7)
8. Such information may indicate that more stringent provisions to be applied like the provisions of the Basel Convention. [↑](#footnote-ref-8)
9. 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/shipments/legis.htm) [↑](#footnote-ref-9)
10. 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 [↑](#footnote-ref-10)
11. This entry does not include scrap assemblies from electric power generation. [↑](#footnote-ref-11)
12. PCBs are at a concentration level of 50 mg/kg or more. [↑](#footnote-ref-12)
13. This entry does not include scrap from electrical power generation. [↑](#footnote-ref-13)
14. Reuse can include repair, refurbishment or upgrading, but not major reassembly [↑](#footnote-ref-14)
15. In some countries these materials destined for direct reuse are not considered wastes. [↑](#footnote-ref-15)
16. The following list of components or constituents are non-exhaustive examples. [↑](#footnote-ref-16)
17. Document containing the information as required under the UN Convention on the Contract for the International Carriage of Goods by Road (CMR Convention). Although the form in which the information should be presented is not mandatory it is recommended to use the standard CMR forms to facilitate communication in case of a control. An extract of the correlation table between codes used in customs documents to describe goods and entries in the Basel Convention Annexes VIII and IX has been included in Appendix III. [↑](#footnote-ref-17)
18. Criteria for the Export and Import of Used Electronic Equipment (DEH, 2005). Available on <http://www.environment.gov.au/settlements/chemicals/hazardous-waste/publications/electronic-paper.html> [↑](#footnote-ref-18)
19. Revised Correspondents' Guidelines No 1 on shipments of waste electrical and electronic equipment (WEEE) (2007). Available on <http://ec.europa.eu/environment/waste/shipments/guidance.htm> [↑](#footnote-ref-19)
20. Guidelines for the classification of used electrical and electronic equipment in Malaysia. (DOE, 2008). Available on <http://www.doe.gov.my/files/u1/ECTRICAL_AND_ELECTRONIC_EQUIPMENTIN_MALAYSIA.pdf> [↑](#footnote-ref-20)
21. The guideline under preparation by the PACE project group 1.1 on environmentally sound testing, refurbishment & repair of used computing equipment contains additional testing protocols. [↑](#footnote-ref-21)
22. These listings are used to determine whether or not the materials in question when known to be waste (destined to an Annex IV destination) are hazardous wastes subject to the Basel Convention or not. A Basel Annex entry does not necessarily mean that the waste material constitutes a Basel Hazardous Waste. However, if the waste material is listed with an “A” (Annex III) listing it is likely to be a hazardous waste (exceptions noted in Annex VIII chapeau). If the waste material has both a “Y” (Annex I) and an “H” (Annex III) listing together then it is likely that the waste material is a Basel hazardous waste unless it can be demonstrated that it does not in fact don’t possess an Annex III characteristic. If the waste material only possesses a “Y” listing it is not likely to be a Basel hazardous waste unless it can be shown to possess an Annex III hazardous characteristic. [↑](#footnote-ref-22)
23. The relevant footnotes for these entries have not been reproduced here. They can be found in the relevant part of Section IV of this guidance document. [↑](#footnote-ref-23)