Draft technical guidelines on transboundary movements of electronic and electrical waste and used electrical and electronic equipment, in particular regarding the distinction between waste and non-waste under the Basel Convention

(Draft of 20 November 2014)

Note to the reader

The current draft is based on document UNEP/CHW/OEWG/INF6 rev1. The text takes into account the suggestions made by the Small Intersessional Working Group on 5 October 2014 and 5 November 2014. Textual suggestions made after 5 October 2014 on other parts, except paragraph 26b, are shown as bracketed texts.

The present texts of paragraph 26b and Alt 26b were prepared during OEWG9. They were included into the document to replace the content of 26b in the draft that was presented to the OEWG9. The current paragraph 26b contains 7 criteria. These have not yet been agreed and still need further development. Developing these criteria was indicated by the Open-ended Working Group (OEWG) as being the preferred option. The text include in Alt 26b is proposed in case it would not be possible to reach consensus on these criteria. It is intended as a temporary measure pending the formulation and adoption of definitive text for paragraph 26b.

The OEWG suggested that further intersessional work would still be needed on paragraph 26b. A large number of suggestions have been made already regarding this paragraph and work on this paragraph will continue.

Pursuant to paragraph 5 of decision OEWG-9/5, parties and others are invited to provide comments by 28 February 2015. A final draft will then be presented to the COP in April 2015 as information document taking into account comments received.

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Acronyms and abbreviations

AQSIQ Administration of Quality Supervision, Inspection and Quarantine of China

BAN Basel Action Network BC Basel Convention

BCRC-SEA Basel Convention Regional Centre for South-East Asia

BFR Brominated flame retardant

CCIC China Certification & Inspection Group

CFCs Chlorofluorocarbons

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

ESM Environmentally sound management

EU European Union

HS Harmonized Commodity Description and Coding System

(or short form Harmonized System)

HSA Health and Safety Authority

ICT Information and communications technologies

ILO International Labour Organization

kg Kilogram

LCD Liquid crystal display

mg Milligram

MPPI Mobile Phone Partnership Initiative

OECD Organization for Economic Cooperation and Development

OHS Occupational health and safety

OHSAS Occupational health and safety assessment series PACE Partnership for Action on Computing Equipment

PBBs Polybrominated biphenyls
PCBs Polychlorinated biphenyls
PCNs Polychlorinated naphthalenes
PCTs Polychlorinated terphenyls

PVC Polyvinylchloride

RoHS Restrictions of the use of certain Hazardous Substances in electrical and electronic

equipment

StEP Solving the e-waste problem

UNECE United Nations Economic Commission for Europe

UNEP United Nations Environment Programme

UNU United Nations University
TBM Transboundary movement
WCO World Customs Organization

I. Introduction¹

A. Scope

- 1. The present technical guidelines provide guidance on [the application of the transboundary movements provisions to] [transboundary movements of] waste electrical and electronic equipment (e-waste) and used electrical and electronic equipment (used equipment) that may or may not be e-waste, in particular on the distinction between waste and non-waste, pursuant to decisions IX/6, BC-10/5 and BC-11/4 of the Conference of the Parties to the Basel Convention on the control of Transboundary Movement of Hazardous Wastes and Their Disposal (the Convention).
- 2. These guidelines focus on clarifying aspects related to transboundary movements of e-waste and used equipment that may or may not be e-waste.] [Interpreting and deciding how the transboundary movement provisions of the Basel Convention apply to e-waste and used equipment in a transparent and consistent manner continues to be a challenge under the Basel Convention. Parties and others are asked to identify and assess a complex set of parameters involving the scope of articles and equipment, the determination of hazard characteristics, the suitability of the disposal or recycling operations and varying national legislation to determine if and how the transboundary movement provisions of the Convention apply to their circumstance. To support this process, additional guidance has been requested by Parties to help define when e-waste is considered a hazardous waste or "other waste" and when used equipment destined for reuse, repair, or refurbishment is to be considered a waste and therefore subject to the Convention.] [It is difficult to define and evaluate the distinction between waste and non waste when considering used equipment destined e.g. for [testing, remanufacturing²], repair, refurbishment or direct reuse. [Certain Parties may consider used equipment destined for repair, refurbishment or upgrading without proper assurances to be waste, while others may not]. Further these guidelines 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.]

Old 4 [These guidelines are intended for government agencies including enforcement agencies that wish to improve the implementation, control and enforcement of the applicable legislation and provide training regarding transboundary movements. They will also serve to inform all actors involved in the management of e-waste and used equipment so they can be aware of the application of the Basel Convention and other considerations when preparing or arranging for transboundary movements of such items.

Old 5 Their application should help reduce transboundary movements of e-waste in the scope of the Convention to the minimum consistent with the environmentally sound and efficient management of such wastes [and reduce the environmental burden of e-waste that currently may be exported to countries and facilities that cannot handle it in an environmentally sound manner³].]

2bis. Only whole used equipment and components that can be removed from equipment, be tested for functionality and either be subsequently directly reused or reused after repair or refurbishment are considered in these guidelines. For the purpose of these guidelines, the term equipment also covers such components.⁴ [(Old 5 ter) Materials removed or derived from e-waste and used equipment e.g. metals, plastics, PVC-coated cables or activated glass, that are waste are not addressed in these guidelines, but may fall under the provisions of the Convention.⁵]

¹ **Remark from the consultant:** Canada has made a number of suggestions concerning the introduction. During its teleconference on 5 November 2014 the SIWG was not in a position to discuss these in detail. The suggested texts from Canada have been included as bracketed text in the introduction to allow for a better informed discussion on the issues raised by Canada.

² Remark from the consultant: A reference to testing was added as this is consistent with the current version of paragraph 26b and the possible inclusion of remanufacturing will be discussed.

³ **Remark from the consultant:** Canada questions if this last part of the sentence is consistent with the first paragraph.

⁴ Definitions and explanations regarding the terms used in these guidelines are included in a glossary of terms in appendix I to the present document.

⁵ **Remark from the consultant**: The text of par 5ter is put into this paragraph. The current text is not yet fully clear. It seeks to express that there may also be issues regarding waste / non waste for materials removed from e-waste, e.g. would the steel scrap be a secondary raw material or a waste or. There may also be questions on hazardousness of these materials, e.g. would the steel scrap be contaminated and therefore exhibit hazardous

- 3. These guidelines provide:
- (a) Information on the relevant provisions of the Convention applicable to transboundary movements of e-waste;
- (b) Guidance on the distinction between waste and non-waste when used equipment is moved across borders;
- (c) Guidance on the distinction between hazardous waste and non-hazardous waste when used equipment is moved across borders;
- (d) General guidance on transboundary movements of [hazardous] e-waste and used equipment and enforcement of the control provisions of the Convention.
- 4. [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 the application of the Basel Convention and other considerations when preparing or arranging for transboundary movements of such items.
- 5. Their application should help reduce transboundary movements of e-waste in the scope of the Convention to the minimum consistent with the environmentally sound and efficient management of such wastes and 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.]
 - [5ter Materials removed or derived from e-waste and used equipment e.g. metals, plastics, PVC-coated cables or activated glass, that are waste are not addressed in these guidelines, but may fall under the provisions of the Convention.]
- 6. These guidelines do not [cover] [address] other aspects of environmentally sound management of e-wastes such as collection, treatment and disposal. These aspects may 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 (on the decisions of the Conference of the Parties regarding these guidelines, see decisions BC-10/20, BC-10/21 and BC-11/15):
 - (a) Mobile Phone Partnership Initiative (MPPI):
 - (i) Revised guidance document on the environmentally sound management of used and end-of-life mobile phones (UNEP/CHW.10/INF/27/Rev.1);
 - (ii) Awareness-raising and design considerations (MPPI, 2009a);
 - (iii) Collection (MPPI, 2009b);
 - (iv) Transboundary movement (MPPI, 2009 c);
 - (v) Refurbishment (MPPI, 2009 d);
 - (vi) Material recovery and recycling (MPPI, 2009 e);
 - (b) Partnership for Action on Computing Equipment (PACE):

- (i) Sections 1, 2, 4 and 5 of the guidance document on the environmentally sound management of used and end-of-life computing equipment (UNEP/CHW.11/6/Add.1/Rev.1);
- (ii) Environmentally sound management criteria recommendations;
- (iii) Guidelines on environmentally sound testing, refurbishment, and repair of used computing equipment;
- (iv) Guidelines on environmentally sound material recovery and recycling of end-of-life computing equipment;
- (v) Guidelines on transboundary movement (TBM) of used and end-of-life computing equipment.

B. About e-waste

- 7. The volume of e-waste being generated is growing rapidly, due to the wide use of 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 latest estimates indicate that in 2012 an amount of 48.9 million tonnes of e-waste was generated globally (Huisman, 2012). The amount of e-waste in the European Union was estimated at between 8.3 and 9.1 million tonnes in 2005 and expected to reach some 12.3 million tonnes in 2020 (United Nations University, 2007). Currently e-waste is exported to countries that are not likely to possess the infrastructure and societal safety nets to prevent harm to human health and the environment, due to factors such as exports being less expensive than managing the waste domestically, the availability of markets for raw materials or recycling facilities and the location of manufacturers of electrical and electronic equipment. However, there are also examples of formal recycling facilities in developing countries and economies in transition that are repairing, refurbishing and recycling used equipment and e-waste in an environmentally sound manner. However, in some cases the conditions outside the facility, e.g. the downstream waste management may not provide environmentally sound management.
- [As a result of the EU Directive on Restrictions of the use of certain Hazardous Substances in 8. electrical and electronic equipment (RoHS) and similar national legislation elsewhere, the use of hazardous substances in various electrical and electronic equipment has been greatly reduced or eliminated in recent years. However, certain types of e-waste may still] [E-waste may] contain hazardous substances such as lead, cadmium, mercury, POPs, asbestos and CFCs 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, the capacity to manage the hazardous substances in e-waste is lacking. As an example, as regards the informal recovery industry in Asia there is clear evidence 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 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.
- 9. E-waste contains valuable materials that can be recovered for recycling including iron, aluminium, copper, gold, silver, platinum, palladium, indium, gallium and rare earth metals, thus contributing to sustainable resource management. The extraction of all of these metals from the Earth has a significant environmental impact. The [recovery and] use of such materials as raw materials after they have become waste can increase the efficiency of their use and lead to conservation of energy and reduction in greenhouse gas emissions when adequate technologies and methods are applied. [In many instances, equipment manufacturers and their suppliers maintain regional facilities that have specialized equipment and trained personnel needed to test, repair, refurbish and remanufacture used equipment in an environmentally sound manner. As these facilities are not present in all countries, used equipment destined for repair, refurbishment and remanufacture may need to be moved across international boundaries to appropriate repair and refurbishment facilities prior to reuse.]
- 10. Direct reuse or reuse after repair or refurbishment can contribute even more to sustainable development. Reuse extends the life of equipment, which reduces the environmental footprint of the resource-intensive production processes of the equipment. It may also provide 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 used equipment is waste and when it is not has led to a number of situations where such equipment is exported to, in particular, developing countries ostensibly for reuse but where a large percentage of these goods are in fact not suitable for further use or are not marketable and must be disposed of in the developing country as waste.

II. Relevant provisions of the Basel Convention

A. General provisions of the Basel Convention

- 11. The Basel Convention aims to protect human health and the environment against the adverse effects resulting from the generation, management, transboundary movements and disposal of hazardous and other wastes.
- 12. Paragraph 1 of Article 2 ("Definitions") of 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".
- 13. 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) above".
- 14. Article 4, paragraphs 2 (a) to (e) and 2 (g), contain key provisions of the Basel Convention pertaining to environmentally sound management, transboundary movement, waste minimization and waste disposal practices that mitigate adverse effects on human health and the environment:

"Each party shall take the 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;
- (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".
- (e) Not allow the export of hazardous wastes or other wastes to a State or group of States belonging to an economic and/or political integration organization that are parties, particularly developing countries, which have prohibited by their legislation all imports, or if it has reason to believe that the wastes in question will not be managed in an environmentally sound manner, according to criteria to be decided on by the parties at their first meeting;
- (f) Prevent the import of hazardous wastes and other wastes if it has reason to believe that the wastes in question will not be managed in an environmentally sound manner."
- 15. Hazardous wastes and other wastes should, as far as is compatible with environmentally sound and efficient management, be disposed of in the country where they were generated (preambular paragraph 8). Transboundary movements of such wastes from the State of their generation to any other State should be permitted only when conducted under conditions which do not endanger human health and the environment (preambular paragraph 9). In addition, transboundary movements of such wastes are permitted only if:

- (a) Such wastes, if exported, are managed in an environmentally sound manner in the country of import or elsewhere (Article 4, paragraph 8);
 - (b) One of the following conditions is met (Article 4, paragraph 9):
 - (i) 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; or
 - (ii) If the wastes in question are required as a raw material for recycling or recovery industries in the country of import; or,
 - (iii) If the transboundary movement in question is in accordance with other criteria decided by the parties.

B. Control procedure for transboundary movements [of waste]

- 16. 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 (Article 6, paragraphs 1 to 4). Parties shall prohibit the export of hazardous wastes and other wastes if the country of import prohibits the import of such wastes (Article 4, paragraph 1 (b)). Some countries have implemented national prohibitions, inter alia following Decision III/1 including an amendment to the Convention banning the export of hazardous wastes from OECD/EU countries and Liechtenstein (proposed Annex VII) to non-Annex VII countries that has not entered into force. The Basel Convention also requires that information regarding any proposed transboundary movement is provided using the accepted notification form (Article 4, paragraph 2 (f)) and that the approved consignment is accompanied by a movement document from the point where the transboundary movement commences to the point of disposal (Article 4, paragraph 7 (c)).
- 17. Furthermore, hazardous wastes and other wastes subject to transboundary movements should be packaged, labelled and transported in conformity with international rules and standards (Article 4, paragraph 7 (b)).⁶
- 18. 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 if alternative arrangements cannot be made for their disposal in an environmentally sound manner (Article 8, first sentence). In the case of illegal traffic (as defined in Article 9, paragraph 1) as the result of the conduct on part of the exporter or generator, the country of export shall ensure that the wastes in question are
- (a) Taken back by the exporter or the generator or, if necessary, by itself into the State of export; or if impracticable;
- (b) Otherwise disposed of in accordance with the provisions of the Convention (Article 9, paragraph 2).
- 19. No transboundary movements of hazardous wastes and other wastes are permitted between a party and a non-party to the Convention (Article 4, paragraph 5) unless a bilateral, multilateral or regional arrangement exists, as required under Article 11 of the Convention.

C. Definitions of waste and hazardous waste

- 20. 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 defines disposal in article 2, paragraph 4, as "any operation specified in Annex IV to this Convention". 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 non-waste in another country.
- 21. 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

⁶ In this connection, the United Nations Recommendations on the Transport of Dangerous Goods (Model Regulations) (ECE, 2003a – see annex V, Bibliography) or later versions should be used.

is defined as hazardous waste under the Convention. The Convention also requires that parties inform the other parties, through the Secretariat of the Convention, of their national definitions (article 3). Providing detailed and specific information on the national definitions of hazardous waste can [promote compliance and] avoid ambiguity concerning the applicability of national definitions.

22. To aid in distinguishing hazardous wastes from non-hazardous wastes for the purpose of Article 1, paragraph 1 (a), two annexes [,adopted by the Parties] have been inserted into the Convention. Annex VIII includes wastes considered to be hazardous according to Article 1, paragraph 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, paragraph 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 IV. B of these guidelines.[Annex IX includes a listing for non-hazardous electrical and electronic equipment that also addresses the distinction between waste and non-waste equipment:

B1110 Electrical and electronic assemblies *** Electrical and electronic assemblies (including printed circuit boards, electronic components and wires) destined for direct reuse (Footnote: Reuse can include repair, refurbishment or upgrading, but not major reassembly;) and not for final disposal (Footnote: In Some countries these materials destined for direct reuse are not considered wastes).

While subject to some interpretation by national governments, the B1110 listing in Annex IX of the Convention provide that exports of equipment for reuse, including reuse after repair, refurbishment, or upgrading, are generally outside the scope of the Convention because the equipment does not qualify as a waste or, alternatively, such equipment is generally viewed as non-hazardous.]

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

A. General considerations⁷

- 23. To determine if used equipment is waste it may be necessary to examine the history of an item and its proposed fate on a case-by-case basis. However, there are characteristics of the used equipment that are likely to indicate whether it is waste or not.
- 24. Without prejudice to paragraph 26 below, where the holders of used equipment claim that this is intended to be or is a transboundary transport of used equipment intended for direct reuse and not e-waste, the following should be provided or be in place to back up this claim to an authority on its request (prior to the transport, either generally or on a case-by-case basis)⁸:
 - (a) A copy of the invoice and contract relating to the sale and/or transfer of ownership of the used equipment, and documentation accompanying the transport according to paragraph 30 [and Appendix III], including inter alia a signed declaration that indicates that the used equipment has been tested and is destined for direct reuse and fully functional [or is destined for reuse following minor repair, refurbishment, or upgrading] [and includes information on the further user or, where this is not possible, the retailer or distributer];
- (b) Evidence of evaluation or testing⁹ in the form of a copy of the records (certificate of testing proof of functionality) on every item within the consignment and a protocol containing all record information (see section III C below);
- (c) A declaration made by the holder who arranges the transport of the equipment that none of the equipment within the consignment is defined as or considered to be waste in any of the countries involved in the transport (countries of export and import, and, if applicable countries of transit);
- (d) Appropriate protection against damage during transportation, loading and unloading, in particular through sufficient packaging ¹⁰ and stacking of the load.

⁷ The text of paragraph 26b is still under review. That paragraph refers back to paragraph 24 for information the holder should provide and to packaging requirements that should be in place. Depending on the outcome of the discussion on paragraph 26b some of the other parts of this section may need to be amended to assure consistency and the flow of the text in this section.

⁸ ITI suggests that the Guidelines recommend holders retain documentation for a period of one year following the date a transboundary transport commences.

⁹ Testing of used equipment should be performed before shipment in the country of export.

 $^{^{10}}$ With regard to computing equipment, see the packaging guidelines developed under PACE.

B. Situations where used equipment should normally be considered waste, or not be considered waste

- 25. Used equipment is waste in a country if it is defined or considered as waste under the provisions of its national legislation. Without prejudice of paragraph 26, used equipment [may qualify as waste based on a combination of the following considerations] [should normally be considered waste if]:
- (a) [(old (f))The equipment is destined for disposal or recycling instead of reuse or its fate is uncertain;]
- (b) The equipment is not complete essential parts are missing and the equipment cannot perform its essential key functions;
- (c) It shows a defect that materially affects its functionality and fails relevant functionality tests;
- (d) It shows physical damage that impairs its functionality or safety, as defined in relevant standards;
- (e) The protection against damage during transport, loading and unloading operations is inappropriate, e.g. the packaging or stacking of the load is insufficient;
- (f) [(removed to (a))The appearance is particularly worn or damaged, thus reducing the marketability of the item(s);]
- (g) The item has among its constituent part(s) hazardous components that are required to be discarded [under national legislation] or are prohibited [from being] [to be] exported or [prohibited for use] [used] in such equipment under national legislation [in the country of import];¹¹
- (h) The equipment is destined for disposal or recycling instead of reuse or its fate is uncertain;
 - (i) There is no regular market for the equipment;
 - (j) It is destined for [disassembly and] cannibalization (to gain spare parts); or
- (k) The price paid for the items is significantly lower than would be expected from fully functional equipment intended for reuse.
- 26. Used equipment should normally not be considered waste:
- (a) Where the criteria in paragraph 24 (a) to (d) above are met and it 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
- (b) [When an exporter of used equipment and their components exports such equipment for testing, repair and refurbishment and all of the following conditions are met¹²:
 - Equipment and their components are exported only to Parties that have notified the Secretariat of the Basel Convention via Article 13(2) that they do not consider used equipment subject to the conditions included in paragraph 26b to be waste. Further restrictions made on a national basis can be so noted (e.g. import bans for certain types of used equipment). In the same transmission these Parties shall indicate which facilities are permitted to receive and process the used equipment under the conditions in paragraph26b. Such information will be publicly available on the SBC website and be kept up to date:
 - (ii) Exported equipment and their components are compliant with legislation on Restrictions of the Use of Certain Hazardous Substances (RoHS)¹³ compliant and do not contain cathode ray tubes (CRTs);

¹¹ 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.

¹² For medical equipment a review should be undertaken to assess if the conditions mentioned would be applicable or that modifications would be needed. The information provided by DITTA could be used as first basis for this review.

¹³ A reference to the scope of ROHS may be needed.

- (iii) Used equipment and their components and any residual waste, materials, and products shall continue to be owned or controlled by the exporter (with or without third parties involved in implementation) throughout the export, transit, import, testing, repair, and refurbishment processes, until they are either tested, fully functional equipment or components and are made available for direct reuse, or as resulting scrap/waste disposed of according to vi below;
- (iv) Each shipment is sent under a valid contract between the exporter and the importing facility, requiring the importing facility to complete all applicable requirements in paragraph 26b. The exporter shall perform regular on-going due diligence to ensure importing facility(s) and any other third parties involved are consistently meeting the requirements of paragraph 26b;
- (v) Each shipment is accompanied by a written and signed declaration by the exporter which is readily available in full to all relevant government authorities. The declaration by the exporter shall declare that all of the criteria of paragraph 26 b are met. A standard form (Appendix II) can be used for such a declaration;
- (vi) All residual waste generated from the testing/repair/refurbishment operation which is hazardous according to the Basel Convention definitions (Article 1, 1(a) and 1(b)) or its hazardous characteristics are unknown, shall be disposed of [in an environmentally sound manner (ESM) in accordance with the Basel Convention][in an Annex VII country][in an Annex VII country unless accompanied by a conclusive proof that the residual hazardous waste can be treated at a facility in the importing country is ESM]. Any transboundary movements necessary shall be accomplished in accordance with the Basel Convention; and
- (vii) [Each piece of equipment and their components is individually packaged to prevent hazards and loss of value, including protection against abrasion, static charges, ignition, loss of fluids or toxic contaminants, or breakage.]
 [Appropriate protection against damage during transportation, loading and unloading, in particular through sufficient packaging 14 and stacking of the load]

Alt 26(b) [For cases of transboundary transports of used equipment other than the case referred to in paragraph 26, Parties may define their own conditions, such as on

- accountability of the exporter,
- compliance with legislation on hazardous substances in products,
- packaging,
- import restrictions, and
- management of residues arising from the repair, refurbishment or testing operations in line with the provisions of the Convention

upon which such equipment may not be waste. Parties should inform the Secretariat about any such conditions. It should be documented by conclusive proof that these conditions are met and the transport should be accompanied by appropriate documentation. In the absence of such documentation, the transboundary transport of such equipment should be considered as a transboundary movement of waste.]

26bis. [The documentation accompanying the transport of used equipment falling under paragraph 26 (b) should contain the information referred to in paragraphs 24(a) and 30.] The documentation accompanying the transport of used equipment falling under paragraph 26(b) should contain the following information¹⁵:

¹⁵ Insofar the information (except for subparagraph (b)) is identical for all equipment in the same transport, the information may be provided covering all equipment in a transport.

¹⁴ With regard to computing equipment, see the packaging guidelines developed under PACE.

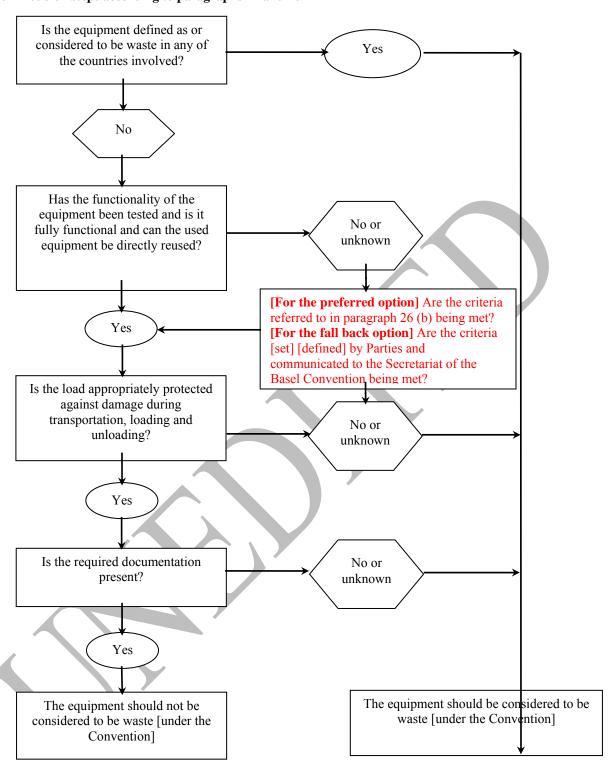
- (a) Name of the holder who arranges the transport, and the receiving facility ¹⁶;
- (abis) Description of the equipment (e.g. name);
- (b) Quantity of equipment;
- (c) Date of the movement;
- (d) Countries concerned;
- (e) Signed declaration by the holder who arranges the transport of the equipment, including the declaration according to paragraph 24(c).

[Upon receipt of the movement, the receiving facility should provide a signed declaration of receipt]. A recommended form for the documentation [according to paragraph 26 (b)] is contained in appendix II.]



¹⁶ **Remark of the consultant:** In the current texts of par 26b the importer and the carrier do not have any specific role to play. Reference to the holder who arranges for the transport (and has the obligation to provide the evidence that the transport meets the criteria as set in 26b) and to the receiving facility where the repair, refurbishment or testing will take place) may be sufficient.

Figure 1 Decision steps according to paragraphs 24 and 26 $^{17}\,$



¹⁷ **Remark from the Consultant:** The box that refers to paragraph 26b provides text provides two alternative texts, related to the texts of both the preferred option and the fall-back position. This was included following the suggestions from Germany during the conference call of 5 October 2014.

This figure refers both to waste as defined under the Basel Convention as well as to national definitions. Therefore the reference at the end to waste as defined under the Convention may be confusing.

C. Evaluation and testing of used equipment destined for direct reuse

27. Holders who prepare an export of used equipment destined for direct reuse covered by paragraph 26 (a) rather than e-waste should take the following steps:

Step 1: evaluation and testing

28. The tests to be conducted depend on the kind of equipment. Functionality should be tested and the presence of [commonly known] 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 essential key functions is sufficient. Section IV. B of these guidelines provides guidance on the evaluation for the presence of hazardous substances and components. A list of references to examples of functionality tests for certain categories of used equipment is provided in appendix IV to the present document.

Step 2: recording

- 29. Results of evaluation and testing should be recorded. The record should contain the following information:
 - (a) Name of the item;
 - (b) Name of the producer (if available)
 - (c) Identification number of the item (type no.), where applicable;
 - (d) Year of production (if available);
 - (e) Name and address of the company responsible for evidence of functionality;
- (f) Result of tests as described in step 1 (e. g. Naming defective parts and defect or indication of full functionality) including date of the functionality test;
 - (g) Kind of tests performed;
 - (h) Signed declaration [by the company responsible for evidence of functionality].
- 30. The record should accompany the transport and should be fixed securely but not permanently on either the used equipment itself (if not packed) or on the packaging so it can be read without unpacking the equipment. A recommended form for the record on the results of evaluation and testing, including the declaration according to paragraph 24(a), is contained in appendix III.

IV. Guidance on transboundary movements of e-waste

A. General considerations

31. When e-waste is considered to be hazardous waste according to Article 1, paragraph1 (a) of the Convention or by national legislation (Article 1, paragraph1 (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 contain a specific procedure. However, certain parties have implemented procedures in those cases, such as those applicable for transboundary movements of "green-listed" waste under European Union legislation, 18 or the procedure for pre-movement inspection of recycling materials as applicable for China.

32. In a case where a competent authority involved in transboundary movements of e-waste considers a specific item to be hazardous waste according to its national law, while 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 as to whether 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

¹⁸ 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).

¹⁹ Pre-movement inspections for recycling materials are established by the General Administration of Quality Supervision, Inspection and Quarantine of China (AQSIQ). Information on the procedure can be found on the web-site of the China Certification & Inspection Group (CCIC), which is authorized to handle this procedure in various countries worldwide, e.g in Europe at http://www.ccic-europe.com.

movement would be regarded as illegal. [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.]

- 33. [Certain parties may consider used equipment destined for repair, refurbishment or upgrading [without proper assurances] 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 IV 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.
- 34. If, however, following Article 2, paragraph 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 is classified as hazardous waste or other waste, the Basel Convention control procedure will not apply²⁰]

B. Distinction of hazardous waste and non-hazardous waste

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

"A1180 Waste electrical and electronic assemblies or scrap ²¹ 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)."²²

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

"B1110Electrical and electronic assemblies:

- Electronic assemblies consisting only of metals or alloys;
- Waste electrical and electronic assemblies or scrap²³ (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, ²⁴ and not for recycling or final disposal." ²⁵

Equipment will often contain hazardous components, examples of which are indicated in entry A1180 of Annex VIII. E-waste [should therefore be presumed to be hazardous waste unless it can be shown that it does not contain such components and in particular]: [containing such components should

Remark of the consultant: The texts for paragraph 26b that were included at OEWG9 include provisions that refer to repair and refurbishment. Moreover the information is generally a duplication of issues that are already covered in paragraphs 31 and 32. Therefore it seems no longer necessary to keep the text of paragraphs 33 and 34. It is suggested to remove the text of these two paragraphs. However, ITI continues to see the text in these two paragraphs as helpful to governments and stakeholders and suggest expanding it with the scenario where none of the states concerned classify transport for repair as waste.

²¹ This entry does not include scrap assemblies from electric power generation.

²² PCBs are at a concentration level of 50 mg/kg or more.

²³ This entry does not include scrap from electrical power generation.

²⁴ Reuse can include repair, refurbishment or upgrading, but not major reassembly.

²⁵ In some countries these materials destined for direct reuse are not considered wastes.

therefore be presumed to be hazardous waste unless it can be shown either that it does not contain such components or that it does not exhibit hazardous characteristics].²⁶

- (a) Lead-containing glass from cathode ray tubes (CRTs) and imaging lenses, which are assigned to Annex VIII entries A1180 or A2010 "glass from cathode ray tubes and other activated glass". [[This waste also belongs to] [These components also belong to] category Y31 in Annex I, "Lead; lead compounds" and [is likely to] [may] possess hazard characteristics H6.1, H11, H12 and H13 included in Annex III;
- (b) Nickel-cadmium batteries and batteries containing mercury, which are assigned to Annex VIII entry A1170 "unsorted waste batteries...". [This waste also belongs to] [These components also belong to] category Y26 in Annex I, "Cadmium; cadmium compounds" or Y29 "Mercury, mercury compounds" and [is likely to] [may] possess hazard characteristics H6.1, H11, H12 and H13;
- (c) Selenium drums, which are assigned to Annex VIII entry A1020 "selenium; selenium compounds". [This waste also belongs to] [These components also belong to] category Y25 in Annex I, "Selenium; selenium compounds" and [is likely to] [may] possess hazard characteristics H6.1, H11, H12 and H13;
- (d) Printed circuit boards, which are assigned to Annex VIII entry A1180 "waste electronic and electrical assemblies......", and entry A1020 "antimony; antimony compounds" and "beryllium; beryllium compounds". These assemblies contain brominated compounds and antimony oxides as flame retardants, lead in solder and 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 [is likely to] [may] possess hazard characteristics H6.1, H11, H12 and H13;
- (e) Fluorescent tubes and backlight lamps from liquid crystal displays (LCD), which contain mercury and are assigned to Annex VIII entry A1030 "Mercury; mercury compounds". [This waste also belongs to] [These components also belong to] category Y29 in Annex 1, "Mercury; mercury compounds" and [is likely to] [may] possess hazard characteristics H6.1, H11, H12 and H13;
- (f) Plastic components containing Brominated Flame Retardants (BFRs) [, in particular BFRs that are persistent organic pollutants according to the Stockholm Convention, may where appropriate 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". In general, waste containing brominated flame retardants also] belong[s] to category Y45 in Annex I, organohalogen compounds other than substances referred to elsewhere in Annex I . If antimony compounds are used as synergist for these brominated flame retardants, in addition category Y27 "Antimony, antimony compounds" can be assigned. Depending on the concentration and the chemical properties of the brominated flame retardants and their synergists such waste [is likely to] [may] possess hazard characteristics H6.1, H11, H12 and H13.²⁷
- (g) Other components containing or contaminated with mercury, such as mercury switches, contacts and thermometers, which are assigned to Annex VIII entry A 1010, A1030 or A1180. [This waste also belongs to] [These components also belong to] category Y29 in Annex I," Mercury; mercury compounds" and [is likely to] [may] possess hazard characteristics H6.1, H11, H12 and H13;
- (h) 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] [may] possess hazardous characteristics H3, H11, H12and H13;
- (i) Components containing asbestos, such as in wires, cooking stoves and heaters, which are assigned to annex VIII entry A 2050. [This waste also belongs to] [These components also belong to] category Y 36 in Annex I, "Asbestos (dust and fibres)" and [is likely to] [may] possess hazardous characteristic H 11.

²⁶ The following list of components or constituents are non-exhaustive examples.

²⁷ **Remark from the consultant:** The text included was suggested by the EU to address some information that was factually incorrect.

37 bis. [As a general matter, shipments of wastes comprised of the waste components indentified here may qualify as hazardous wastes if the wastes exhibit hazardous characteristics contained in Annex III. However, the mere presence of such a component in electrical or electronic equipment should not in and of itself cause the equipment as a whole to be deemed hazardous under the Convention.] Further guidance and examples of hazardous and non-hazardous equipment and on hazardous components that can be found in electronic and electrical equipment is contained in appendix IV to the present document.

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

- 37. Inspections should be undertaken by competent bodies of State authorities (e.g. police, customs and (environmental) inspectors) at facilities and during the movement. Holders of used equipment who arrange the transport should ensure that it is accompanied by appropriate documentation according to paragraphs 24, 26, 29, 30 and 39 of those guidelines and that it 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.
- 38. For practical reasons of control, every load of used equipment should also be accompanied by a declaration of the liable person on its responsibility and by a relevant transport document, e.g. by a waybill or a CMR document where applicable. This document contains a description of the goods transported using the Harmonized Commodity Description and Coding System (normally referred to as the "Harmonized System") developed by the World Customs Organization (WCO).
- 39. In the absence of proof that an item is used equipment and not e-waste through appropriate documentation [according to paragraphs 24, 26, 29, 30 and 39] and appropriate protection against damage during transportation, loading and unloading, in particular through sufficient packaging and appropriate stacking of the load which should be the obligations of the holder who arranges the transport, the relevant State authorities (e. g. customs, police or environmental agencies) should consider an item 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 comprises a [possible] case of illegal traffic as specified in Article 9 of the Convention. In these circumstances the relevant competent authorities are obliged to abide with the provisions of Article 9. Illegal traffic is to be considered a criminal offence in accordance with Article 4.3 of the Convention.

40bis. When e-waste is exported as hazardous waste, the documentation required under the control procedure of the Convention should accompany the consignment.

40ter. The Secretariat of the Basel Convention has cooperated with the WCO to establish a table providing an overview of which codes of the Harmonized System contain materials that can be found in Annexes VII and IX to the Basel Convention.²⁹ 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.

40. Health and safety issues and potential risks for enforcement agents (such as customs officers) are important 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 it is opened it for inspection. The load may also contain hazardous substances that could be released when inspecting the load. Further information regarding health and safety aspects for inspections is contained in appendix IV to the present document.

²⁸ Document containing the information as required under the 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 that the standard CMR forms be used to facilitate communication in case of a control.

²⁹ The latest version of the table can be found on the web-site of the WCO under http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/interconnection-table.aspx. The table contains a correlation with goods covered by a number of international conventions, including the Basel Convention.

[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 having been agreed to internationally. Their purpose is to assist readers to better understand these guidelines. Insofar as appropriate, the use of these terms has been aligned with terms used in other guidelines [and guidance documents] developed under the Basel Convention.

Terminology	Description	Remark ³⁰
Basel Convention	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, adopted on March 22, 1989 and entered into force in 1992.	
Component	Element with electrical or electronic functionality [designed to be] connected together with other components, including by soldering to a printed circuit board, to create an electric or electronic circuit with a particular function (for example an amplifier, radio receiver, monitor, hard-drive, motherboard, battery).	
Direct reuse	The using again, by a person other than its previous owner, of equipment that is not waste for the same purpose for which it was conceived without the necessity of repair or refurbishment ³¹	Under discussion in the legal clarity group
Disposal	Any operations specified in Annex IV of the Basel Convention (Article 2, paragraph 4, of the Convention).	Under discussion in the legal clarity group
Environmentally sound management	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 (Article 2, paragraph 8, of the Convention).	
Equipment	Electrical and electronic equipment that is dependent on electric currents or electromagnetic fields in order to work properly, including components that can be removed from equipment and can be tested for functionality and either be subsequently [directly] reused or reused after repair or refurbishment. [This term does not include large-scale stationary industrial tools or large-scale fixed installations.]	
[Equipment for professional use	[Equipment that is designed to be used solely by professional users. Equipment that is likely to be used by private households, or by private households as well as by professional users is not equipment for professional use][Specialized equipment that is designed for commercial and business use but not equipment that is considered to be common for use in households.][E.g, mainframe computers and large copying machines would be professional equipment whereas personal computers, mobile phones and small copying machines would not be equipment for professional use.]]	Used in some proposals for par 26b in previous drafts, may no longer be needed
Essential key function	The originally intended function(s) of a unit of equipment that will satisfactorily enable the equipment to be reused.	Under discussion in the legal clarity group

³⁰ A new column with remarks was introduced to make the reader aware of the fact that some of the terminology may still undergo some change depending on the development of the work of the legal clarity group and the way how the discussion on paragraph 26b develops. The texts included in the current glossary do not yet take on board changes proposed by the legal clarity group, pending further developments in this group and assessment of any specific clarifications that may be needed for these guidelines (please refer to Annex I of document UNEP/CHW/OEWG.9/INF/20).

³¹ **Remark of the consultant :** this is in line with the adopted definition in the PACE guideline

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.

Under discussion in the legal clarity group

The remanufacture of a single unit with multiple parts taken from [Major reassembly

multiple other units]

Other waste Wastes included in Annex II of the Convention.

Equipment that does not meet the definition of "waste". (See below)] [Non-waste

Producer The international and local manufacturer of equipment or the importer of record of new or used equipment to be placed on the

market at first invoice by sale.

Used in some proposals for par 26b in previous drafts, may no longer be needed

Relevant operations specified in Annex IV B of the Basel Recovery

Convention; recycling operations are part of this annex.

Under discussion in the legal clarity group

discussion in

clarity group

Under

the legal

Refurbishment [Process for transforming reusable equipment or components into a

refurbished good through refurbishing or reconditioning the equipment. With respect to used equipment, refurbishment may include such activities as cleaning, data sanitization and minor repair.] [Creating refurbished or reconditioned equipment, including such activities as cleaning, data sanitization and (software)

upgrading.][Modification of fully functional equipment to increase its performance and/or functionality or to meet applicable technical standards or regulatory requirements, including through such activities as cleaning, data sanitization and upgrading.]

Repair Fixing specified faults in equipment [and/or replacing defective

components of equipment in order to bring the equipment into a fully functional condition].

Under discussion in the legal clarity group

Reuse The using again, by a person other than its previous owner, of equipment that is not waste for the same purpose for which it was

conceived, possibly after repair or refurbishment.

Under discussion in the legal clarity group

Root cause analysis A step-by-step method that leads to the identification of the initial or

root cause of an equipment failure.

Used in some proposals for par 26b in previous drafts, may no longer be needed

Modification of fully functional equipment by the addition of new **Upgrading**

software or hardware to increase its performance and/or functionality.

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).

Warranty [Either an obligation under national legislation towards the

> consumers for the lack of conformity of equipment on the sale of consumer goods, or any written agreement by a seller or producer to repair or replace equipment if it does not meet the specifications set out in the guarantee statement or in the relevant advertising.] [A warranty provided at product sale, an extended warranty provided at

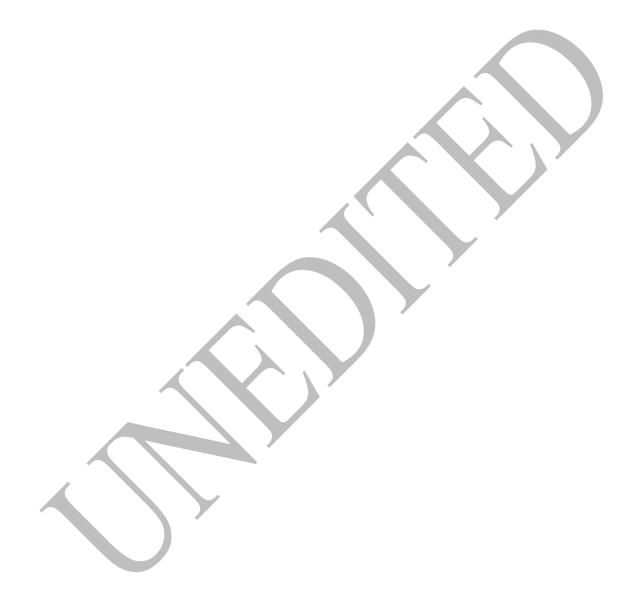
Used in some proposals for part 26b in previous drafts, may no longer be

or after product sale, and a repair contract, provided at or after product sale.]

needed

Waste electrical and electronic equipment

Electrical or electronic equipment that is waste, including all components, sub-assemblies and consumables which are part of the equipment at the time the equipment becomes waste.]



[Appendix II: Information accompanying transboundary transports of used equipment falling under paragraph 26 (b)³²

1. Holder who arranges	2. Receiving facility	3. Description of the equip	ment (e.g. name):			
the transport Name:	Name:					
Address:	Address:					
Contact person:	Contact person:					
Tel.:	Tel.:					
Fax:	Fax:					
E-mail:	E-mail:					
4. Purpose of the transport: ³³		I				
[For the preferred option of p	oaragraph 26b					
Testing						
Repair						
Refurbishment						
☐ 1						
[In case the fall-back option is	s needed;	X . I				
free text field]	,					
5. Actual quantity:						
6. Countries/States concerned	d:					
Export/dispatch						
7. Declaration of the holder w	ho arranges the transport	of the equipment:				
I declare that	1 10					
[For the preferred option of p						
a) the equipment in this transpo			waste in any of the countries			
involved in the transport and in			m. of immout house in diseased it			
		ch the authorities of the count the Secretariat of the Basel Co				
	non waste as paonshed by	ne secretariat of the Buser Co	m vention,			
[In case the fall-back option is		1.61				
a) the equipment in this transport is equipment [that is not defined as or considered to be waste in any of the countries involved in the transport and] meets any conditions the Parties involved in the transport have defined and						
communicated to the Secretariat of the Basel Convention.						
b) the above information is complete and correct to the best of my knowledge.						
Name: Date: Signature:						
		<u> </u>				
TO BE COMPLETED BY THE RECEIVING FACILITY						
[8. Movement received at the receiving facility: \Box Quantity/volume received:						
N						
Name:	Date:	Signature:] ³⁴				

³² **Remark from the consultant:** The appendix was updated to reflect the development on paragraph 26b. Two alternative texts are suggested for boxes 4 and 7 to reflect both the preferred option and the fall back options. This was included following the suggestions from Germany during the conference call of 5 October 2014.

³³ If multiple options apply to the equipment, please indicate them all.

³⁴ COCIR suggests that this may be less relevant for border controls and might be removed.

Appendix III: [Form for] [Information accompanying transboundary transports of used equipment falling under paragraph 26 (a), including on] recording the results of evaluation and testing of used equipment [(paragraph 26 (a))]

1 Hald	o	2 Commo	ny responsible for	ovidonos	[3. Carrier		
1. Holder who	arranges the				[S. Carrier		
	transport (responsible for testing):		of functionality (if different than holder):		Name:		
Name:		Name:			Address:		
Address:					Phone No:		
Contact person	•	Address:	rson.		E-mail:]		
Tel:	•	Tel:	Contact person:		L-man.j		
E-mail:		E-mail:					
[4. Importer Name:			etailer [or distribut rom importer):]	tor], [(if	6. [Country of export[/dispatch]:		
Address:							
Phone No:		Contact pe	erson:		Country of import[/destination]:]		
E-mail:]		Tel:			importi/destination]:]		
_		E-mail:					
7. Declaration: [I, the person that conducted the evaluation and testing declare that the results of evaluation and testing are complete and correct to the best of my knowledge. Name: Date: Signature:]							
I, the holder who arranges the transport of the equipment listed below, hereby declare that prior to export the used equipment listed below was tested and is fully functional. ³⁵ I confirm that this equipment is not defined as or considered to be waste in any of the countries involved in the transport and is destined for direct reuse ³⁶ and							
not for recovery or disposal operations.							
Name: Date: Signature:							
8. Name of the item of equipment ³⁷	9. Name of the producer	10. Identification number (type	11. Year of production (if available)	12. Date of function	13. Kind of tests performed and results of test (e.g. indication of full		

³⁵ Equipment is "fully functional" when it has been tested and demonstrated to be capable of performing at least the essential key functions they were designed to perform.

Essential key functions are the originally intended function(s) of a unit of equipment that will satisfactorily enable the equipment to be reused.

³⁶ The using again, by a person other than its previous owner, of equipment that is not waste for the same purpose for which it was conceived without the necessity of repair or refurbishment.

³⁷ List the equipment for which the information in the boxes 1 to 3 is the same and that is intended to be moved together and identify the names of the equipment such as: PC, refrigerator, printer, TV, etc.

(if available)	no.) (if applicable)	ality testing	functionality or indication of defective parts and defect) ³⁸



³⁸ Attach details if necessary.

Appendix IV: Reference material

This appendix contains references to information on functionality testing for certain categories of used equipment (paragraph 28), hazardous and non-hazardous equipment and hazardous components that can be found in such equipment (paragraph 37 bis) and information regarding health and safety aspects for inspections (paragraph 41).

1. Functionality testing or evaluation

This section contains references to tests and procedures for functionality tests of electrical and electronic equipment. The examples are not meant to be exhaustive but illustrate procedures as they are applied by some parties or recommended in other guidance documents under the Basel Convention. Testing procedures and protocols for other categories of used equipment are not yet available.

References from parties

Australia

Criteria for the export and import of used electronic equipment (DEH, 2005). Available on http://pandora.nla.gov.au/pan/51666/20050902-

0000/www.deh.gov. au/settlements/publications/chemicals/hazardous-waste/electronic-paper. html

Annex B of the document contains parameters that may be used when testing functionality of certain types of equipment.

European Union

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

Appendix 1 to these guidelines contains parameters that may be used when testing functionality of certain types of equipment.

Malaysia

Guidelines for the classification of used electrical and electronic equipment in Malaysia. (DOE, 2008). Available on http://www.doe.gov.my/portal/wp-

content/uploads/2010/07/ECTRICAL_AND_ELECTRONIC_EQUIPMENTIN_MALAYSIA.pdf

Paragraph 7 of these guidelines contains parameters that may be used when testing functionality of certain types of equipment.

Norway

A guide for exporters of used goods (Klif, 2009) by the Norwegian Climate and Pollution Agency. Available on http://www.klif.no/publikasjoner/2516/ta2516.pdf

Example images of criteria on pages 4-8 can be used when evaluating functionality of used goods.

References from the guidance documents under the Basel Convention

MPPI - Mobile phones

The guidance document on the environmentally sound management of used and end-of-life mobile phones that was adopted at the tenth session of the Conference of the Parties (UNEP/CHW.10/INF/27/Rev.1 contains a number of proposed tests on functionality for mobile phones in its section 5.2.1.4

PACE - Computing equipment

The guidance document on environmentally sound management of used and end-of-life computing equipment that was adopted at the eleventh session of the Conference of the Parties (UNEP CHW11/6/Add.1/Rev.1) contains in appendix 5 to the annex a set of functionality tests for used computing equipment.

PACE - Laptop batteries

The guidance document on environmentally sound management of used and end-of-life computing equipment that was adopted at the eleventh session of the Conference of the Parties (UNEP CHW11/15) contains in appendix 6 to the annex a set of functionality tests for laptop batteries.

Basel Convention regional centre for South-East Asia (BCRC-SEA)

Technical Guidelines for 3 R (Reduce, Reuse, Recycle) of End-of-Life Electrical and Electronic Products contains a number of functionality tests for different types of equipment in its annexes. These provide for specific tests for refrigeration systems, twin-tub washing machines, automatic washing machines, TVs and audio systems and PCs. The guidelines can be found at http://www.bcrc-sea.org/?content=publication&cat=2

2. Hazardous and non-hazardous equipment and hazardous components that can be found in such equipment

Section IV B of the guidelines contains information about the distinction between hazardous and non-hazardous e-waste. Additional guidance and examples of hazardous and non-hazardous equipment and on hazardous components that can be found in equipment can be found in the following reference material.

Switzerland

The e-waste guide developed as part of the "Global Knowledge Partnerships in e-Waste Recycling" programme, initiated by the Swiss State Secretariat for Economic Affairs (SECO) and implemented by the Swiss Federal Laboratories for Materials Science and Technology (EMPA) contains a section on hazardous substances in e-waste: http://ewasteguide.info/node/219

Sweden

"Recycling and disposal of electronic waste – health hazards and environmental impacts", report no. 6417, March 2011, Swedish Environmental Protection Agency: http://www.naturvardsverket.se/Documents/publikationer6400/978-91-620-6417-4.pdf

3. Health and safety aspects for inspections

Section V of the guidelines provides information for control of transboundary movements of used equipment and e-waste. One of the aspects to be taken into account when carrying out controls is the health and safety of the enforcement agents. Additional information on how to take into account these aspects can be found in the following reference material.

Standardization bodies

OHSAS 18001 Standards for Occupational Health and Safety Management Systems is usually available from national standards institutions, e.g. the British Standards Institution: www.bsigroup.com

International Labour Organization (ILO)

The ILO guidelines on occupational safety and health management systems (ILO-OSH 2001) is available on: http://www.ilo.org/safework/info/standards-and-instruments/WCMS_107727/lang-en/index.htm

ILO has also developed an electronic tool kit on occupational health and safety which includes standards and advice but has to be purchased at a cost of \$395 via:

http://www.ohsas-18001-occupational-health-and-safety.com/ohsas-18001-kit.htm

Basel Convention regional centre for South-East Asia (BCRC-SEA)

A guidance on occupational safety and health aspects specifically developed as guidance for hazardous materials/waste inspection "Panduan Singkat Pengelolaan Limbah B3 Dalam Rangka Pelaksanaan Konvensi Basel - Segi Keselamatan Dalam Inspeksi Bahan Berbahaya" ("Brief guidance for hazardous waste management under the Basel Convention implementation – safety aspects in hazardous materials inspection") written by D. Wardhana Hasanuddin Suraadiningrat, former Senior Technical Advisor to the BCRC-SEA, in 2008. Since it was initially prepared for the Customs &

Excise Authority in Indonesia, it was written in Indonesian (Malay language)³⁹ and may need translation. Contact: baseljakarta@bcrc-sea.org.

Ireland

Ireland's Health and Safety Authority has on-line advice on developing an occupational health and safety (OHS) management system for a number of different occupations/industries. While waste management is not yet included in its directory, the site contains some useful general videos covering the elements of an OHS system (as per Irish legislation) and risk assessment – see these links:

http://vimeo.com/19383449 - about the online system

http://vimeo.com/19971075 - risk assessment

http://vimeo.com/19970831 - safety statement

The guidance on risk assessment and the development of safety policy and a safety statement could be adapted for use by enforcement agents

United Kingdom of Great Britain and Northern Ireland

The United Kingdom Health and Safety Executive has online guidance on occupational health and safety relating to the waste industry and specifically to waste electronic and electrical equipment. See these links:

http://www.hse.gov.uk/waste/index.htm

http://www.hse.gov.uk/waste/waste-electrical.htm.

³⁹ EU questions if a document that is not available in an official UN language is useful as reference.

Appendix V: References

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

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

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

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

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

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

Basel Convention Partnership on Action for Computing Equipment (PACE) environmentally sound management criteria recommendations

Basel Convention Partnership on Action for Computing Equipment (PACE) guidelines on environmentally sound testing, refurbishment, and repair of used computing equipment

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

Basel Convention Partnership on Action for Computing Equipment (PACE). Guidelines on transboundary movement of used and end-of-life computing equipment.

J. Huisman (2012). Waste Electrical and electronic Equipment (WEEE) Handbook. Woodhead Publishing.

Schmidt (2006). Unfair trade: e-waste in Africa. Environmental Health 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.

