

AMENDMENT PROPOSALS

from

THE SECRETARIAT OF THE BASEL CONVENTION

to

THE HARMONIZED SYSTEM COMMITTEE,

WORLD CUSTOMS ORGANIZATION

At its 51st session, Agenda Item VIII 3



BASEL CONVENTION

Secretariat of the Basel Convention

Table of content

AMENDMENT PROPOSAL	1
Converging Basel List A and List B and HS codes.....	5
1 Introduction	5
2 Wastes under consideration.....	6
3 Actual cross reference to HS for the selected A and B codes.....	8
3.1 A1010.....	8
3.2 A1020.....	9
3.3 A1030.....	11
3.4 A1040.....	11
3.5 A1080.....	12
3.6 A1100.....	12
3.7 A1120.....	13
3.8 A1160.....	13
3.9 A1180.....	14
3.10 A3020.....	16
3.11 A3090.....	17
3.12 A3100.....	17
3.13 A3110.....	18
3.14 A3180.....	19
3.15 A4030.....	20
3.16 A4130.....	21
3.17 B1110.....	23
3.18 B1250.....	25
3.19 B3140.....	29
4 Importance of the selected wastes	30
4.1 Quantitative analysis.....	31
4.2 A1010, A1020, A1030, A1040: Metal wastes/compounds	33
4.2.1 Material description.....	33
4.2.2 Occurrence	33
4.2.3 Risks	34
4.3 A1080 & A1100: residues and waste from metal production	34
4.3.1 Material description.....	34
4.3.2 Occurrence	34
4.3.3 Risks	35
4.4 A1160: Waste lead-acid batteries, whole or crushed	35
4.4.1 Material description.....	35
4.4.2 Occurrence	36
4.4.3 Risks	37
4.5 A1180 and B1110: Electrical and electronic assemblies.....	38
4.5.1 Material description.....	38
4.5.2 Occurrence	41
4.5.3 Risks	43
4.6 A3020: Waste mineral oils unfit for their originally intended use	43
4.6.1 Material description:.....	43
4.6.2 Occurrence	43

4.6.3	Risk	44
4.7	A3090, A3100, A3110: leather and fellmongery wastes.....	44
4.7.1	Material description.....	44
4.7.2	Occurrence	45
4.7.3	Risks	45
4.8	A3180: waste containing PCB or other polybrominated analogues	45
4.8.1	Material description.....	45
4.8.2	Occurrence	46
4.8.3	Risks	47
4.9	A4030: Wastes from biocides and phytopharmaceuticals.....	47
4.9.1	Material description.....	47
4.9.2	Occurrence	47
4.9.3	Risks	47
4.10	A4130: Waste packages and containers containing Annex I substances	48
4.10.1	Material description.....	48
4.10.2	Occurrence	50
4.10.3	Risks	50
4.11	B1250: Waste end-of-life motor vehicles	50
4.11.1	Material description.....	50
4.11.2	Occurrence	51
4.11.3	Risks	53
4.12	B3140: Waste pneumatic tyres	53
4.12.1	Material description.....	53
4.12.2	Occurrence	53
4.12.3	Risks	55
5	Amendment proposals	56
5.1	B1110 and A1180: Electrical and electronic assemblies	57
5.2	B1250: Waste end-of-life motor vehicles	67
5.3	B3140: Waste pneumatic tyres	72
5.4	A1010, A1020, A1030, A1040, A1080, A1100, A1120: Metal wastes/ compounds	73
5.5	A1160: Waste lead-acid batteries, whole or crushed	74
5.6	A3020: Waste mineral oils unfit for their originally intended use	76
5.7	A3090, A3100, A3110: leather and fellmongery wastes.....	76
5.8	A3180: waste containing PCB or other polybrominated analogues	77
5.9	A4030: Wastes from biocides and phytopharmaceuticals.....	78
5.10	A4130: Waste packages and containers containing Annex I substances in concentrations sufficient to exhibit Annex III hazard characteristics.....	78
Bibliography	81	
Annexes	84	
Annex 1 Quantitative data.....	84	
Annex 2 Criteria for end-of-life machines and parts thereof, equipment & wreckage, waste and scrap	88	

Converging Basel List A and List B and HS codes

Possible amendment of the HS in respect of certain categories of waste

(Proposal by the secretariat of Basel Convention)

1

Introduction

In order to obtain full implementation of the provisions in the Basel Convention on waste shipment, each competent authority needs to organise its inspection on transfrontier waste movements in an effective way. Customs offices controlling import and export of goods can play a crucial role in this.

The reference frame for regular customs operations and for inspection on transfrontier waste shipments is however structurally different. Customs work with the UN Harmonized Commodity Description and Coding System HS-system to identify goods and products, while the environmental inspection uses the codes in annex VIII (List A) and annex IX (List B) of the Basel Convention.

Moreover the environmental framework focusses on 'wastes', identified 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".

A major hurdle for custom services is to identify, based on the HS code, whether a good destined for export or import, could be a waste. This is even more complicated by the HS approach which is strictly focussing on the nature and composition and the physical properties of a good, and the waste definition which is focussing on the intention 'to discard'.

Nevertheless, research has shown that links can be made between waste codes (annexes VIII and IX) and HS codes, giving indications to customs officers of material flows which are or which have a certain chance to include waste shipments.

The Secretariat of the Basel, Rotterdam and Stockholm Conventions has requested ARCADIS Belgium to provide expert assistance on how the coherence between certain A and B codes and the HS-system could be enhanced, using the regular adaptation and update procedures within the World Customs Organisation WCO.

The proposals for amendments to the HS codes are presented in Chapter 5 in this document while the notes on the proposed materials for amendment are presented in chapters 2-4 as background information for discussion.

Wastes under consideration

The United Kingdom and Peru, Parties to the Basel Convention, have requested for a list of waste items to be included in a more direct way in the HS classification. These codes are mainly focussing but not limited to **WEEE**, waste from electrical and electronic equipment, **ELV**, end-of-life vehicles and **Tyres**. The full list of codes to be examined is:

A1010	Metal wastes and waste consisting of alloys of any of the following: Antimony, Arsenic, Beryllium, Cadmium, Lead, Mercury, Selenium, Tellurium, Thallium but excluding such wastes specifically listed on list B.
A1020	Waste having as constituents or contaminants, excluding metal waste in massive form, any of the following: Antimony; antimony compounds, Beryllium; beryllium compounds, Cadmium; cadmium compounds, Lead; lead compounds, Selenium; selenium compounds, Tellurium; tellurium compounds
A1030	Wastes having as constituents or contaminants any of the following: Arsenic; arsenic compounds, Mercury; mercury compounds, Thallium; thallium compounds
A1040	Wastes having as constituents any of the following: Metal carbonyls, Hexavalent chromium compounds
A1080	Waste zinc residues not included on list B, containing lead and cadmium in concentrations sufficient to exhibit Annex III characteristics
A1100	Dusts and residues from gas cleaning systems of copper smelters
A1120	Waste sludges, excluding anode slimes, from electrolyte purification systems in copper electrorefining and electrowinning operations
A1160	Waste lead-acid batteries, whole or crushed
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). PCBs are at a concentration level of 50 mg/kg or more
A3020	Waste mineral oils unfit for their originally intended use
A3090	Waste leather dust, ash, sludges and flours when containing hexavalent chromium compounds or biocides (note the related entry on list B B3100)
A3100	Waste paring and other waste of leather or of composition leather not suitable for the manufacture of leather articles containing hexavalent chromium compounds or biocides (note the related entry on list B B3090)
A3110	Fellmongery wastes containing hexavalent chromium compounds or biocides or infectious substances (note the related entry on list B

B3110)

A3180	Wastes, substances and articles containing, consisting of or contaminated with polychlorinated biphenyl (PCB), polychlorinated terphenyl (PCT), polychlorinated naphthalene (PCN) or polybrominated biphenyl (PBB), or any other polybrominated analogues of these compounds, at a concentration level of 50 mg/kg or more. The 50 mg/kg level is considered to be an internationally practical level for all wastes. However, many individual countries have established lower regulatory levels (e.g., 20 mg/kg) for specific wastes.
A4030	Wastes from the production, formulation and use of biocides and phytopharmaceuticals, including waste pesticides and herbicides which are off-specification, outdated, or unfit for their originally intended use
A4130	Waste packages and containers containing Annex I substances in concentrations sufficient to exhibit Annex III hazard characteristics
B1110	<p>Electrical and electronic assemblies:</p> <ul style="list-style-type: none">• 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. <p>Reuse can include repair, refurbishment or upgrading, but not major reassembly. In some countries these materials destined for direct reuse are not considered wastes.</p>
B1250	Waste end-of-life motor vehicles, containing neither liquids nor other hazardous components
B3140	Waste pneumatic tyres, excluding those destined for Annex IVA operations

3

Actual cross reference to HS for the selected A and B codes

For each waste code mentioned by the UK and Peru, this chapter describes how it can be linked today with the existing HS codes.

3.1

A1010

A1010	Metal wastes and waste consisting of alloys of any of the following: Antimony, Arsenic, Beryllium, cadmium, lead, Mercury, selenium, tellurium, thallium, but excluding such wastes specifically listed on annex III (among which all metallic, non dispersible)	≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262029	Slag, ash and residues containing mainly lead (excl. those from the manufacture of iron or steel, excl. leaded gasoline sludges and leaded anti-knock compound sludges)	Containing lead. - In case it is recyclable in line with note 3
A1010		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262060	Slag, ash and residues, containing arsenic, mercury, thallium or their mixtures, of a kind used for the extraction of arsenic or those metals or for the manufacture of their chemical compounds	Containing arsenic, mercury or thallium. - In case it is recyclable in line with note 3
A1010		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262091	Slag, ash and residues, containing antimony, beryllium, cadmium, chromium or their mixtures (excl. those from the manufacture of iron or steel)	Containing antimony, beryllium, cadmium. - In case it is recyclable in line with note 3
A1010		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262099	Slag, ash and residues (other than from the manufacture of iron or steel), excluding slag, ash and residues containing mainly zinc, lead, copper, aluminium, arsenic, mercury, thallium or their mixtures	Containing selenium or tellurium. - In case it is recyclable in line with note 3
A1010		≈ HS	is covered by a larger HS code	W = ex. HS	382569	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal picking liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other wastes from chemical or allied industries	If dispersible arsenic, selenium, tellurium waste or mercury code 284390 in case of mercury amalgam with precious metals code 285300 in case of other mercury amalgam

A1010		ex HS	is covered by a larger HS code	W = ex. HS	382590	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal picking liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other residual products of the chemical or allied industries	If dispersible arsenic, selenium, tellurium waste or mercury code 284390 in case of mercury amalgam with precious metals code 285300 in case of other mercury amalgam
A1010		ex HS	includes a narrower HS code	ex. W = HS	7802	Lead waste and scrap	In case of dispersible lead waste
A1010		ex HS	includes a narrower HS code	ex. W = HS	810730	Cadmium waste and scrap	In case of dispersible cadmium waste
A1010		ex HS	includes a narrower HS code	ex. W = HS	811020	Antimony waste and scrap	In case of dispersible antimony waste
A1010		ex HS	includes a narrower HS code	ex. W = HS	811213	Beryllium waste and scrap	In case of dispersible beryllium waste
A1010		ex HS	includes a narrower HS code	ex. W = HS	811252	Thallium waste and scrap	In case of dispersible thallium waste

The Basel code is clearly more broad than the HS codes and includes a set of different metals. Lead, Cadmium, Antimony, Beryllium and Thallium metal wastes can be linked directly to corresponding HS codes and do not create problems. These codes make no distinction between dispersible (A list) and non-dispersible (B-list) material. Metal waste consisting of non-dispersible selenium and tellurium are not covered by specific HS codes and need to be covered by the very general waste basket-codes 382569 and 382590, or by 262099 if the waste can be recycled.

3.2

A1020

Linking A1020 to HS codes occurs in three steps. If the metal is recyclable according to note 3. Heading 2620 applies only to: (a) slag, ash and residues of a kind used in industry either for the extraction of metals or as a basis for the manufacture of chemical compounds of metals, excluding ash and residues from the incineration of municipal waste (heading 2621); and (b) slag, ash and residues containing arsenic, whether or not containing metals, of a kind used either for the extraction of arsenic or metals or for the manufacture of their chemical compounds.

If this is not the case, the code 262190 for other slags and ashes can be used. Unlike the 2620 codes, 'residues' are not included.

If this is as well not the case, only the very general waste basket-codes 382569 and 382590 have to be applied.

A1020	Waste having as constituents or contaminants, excluding metal waste in massive form, any of the following: Antimony, Arsenic, Beryllium, cadmium, lead, Mercury, selenium, tellurium, thallium	≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262029	Slag, ash and residues containing mainly lead (excl. those from the manufacture of iron or steel, excl. leaded gasoline sludges and leaded anti-knock compound sludges)	Containing lead. - In case it is recyclable in line with note 3
A1020		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262060	Slag, ash and residues, containing arsenic, mercury, thallium or their mixtures, of a kind used for the extraction of arsenic or those metals or for the manufacture of their chemical compounds	Containing arsenic, mercury or thallium. - In case it is recyclable in line with note 3
A1020		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262091	Slag, ash and residues, containing antimony, beryllium, cadmium, chromium or their mixtures (excl. those from the manufacture of iron or steel)	Containing antimony, beryllium, cadmium. - In case it is recyclable in line with note 3
A1020		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262099	Slag, ash and residues (other than from the manufacture of iron or steel), excluding slag, ash and residues containing mainly zinc, lead, copper, aluminium, arsenic, mercury, thallium or their mixtures	Containing selenium or tellurium. - In case it is recyclable in line with note 3
A1020		ε HS	is covered by a larger HS code	W = ex. HS	382569	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal picking liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other wastes from chemical or allied industries	If dispersible arsenic, selenium, tellurium waste or mercury code 284390 in case of mercury amalgam with precious metals code 285300 in case of other mercury amalgam
A1020		ε HS	is covered by a larger HS code	W = ex. HS	382590	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal picking liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other residual products of the chemical or allied industries	If dispersible arsenic, selenium, tellurium waste or mercury code 284390 in case of mercury amalgam with precious metals code 285300 in case of other mercury amalgam

3.3

A1030

waste code	waste description	relation sym.	relation description	ex. Notation	HS code	HS description	Conditions
A1030	Wastes having as constituents or contaminants any of the following: Arsenic; arsenic compounds, Mercury; mercury compounds, Thallium; thallium compounds	≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262060	Slag, ash and residues, containing arsenic, mercury, thallium or their mixtures, of a kind used for the extraction of arsenic or those metals or for the manufacture of their chemical compounds (excl. those from the manufacture of iron or steel)	In case it is recyclable in line with note 3
A1030		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262190	Slag and ash, incl. seaweed ash "kelp" (excl. slag, incl. granulated, from the manufacture of iron or steel, ashes and residues containing arsenic, metals or metal compounds and those from the incineration of municipal waste)	In case not mentioned above and if slag or ash
A1030		⊆ HS	is covered by a larger HS code	W = ex. HS	382569	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other wastes from chemical or allied industries	In case not mentioned above
A1030		⊆ HS	is covered by a larger HS code	W = ex. HS	382590	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other residual products of the chemical or allied industries	In case not mentioned above

Waste code A1030 corresponds very well with HS code 262060 describing slags ashes and other types of residues or wastes containing arsenic, mercury or thallium. The HS code is however limited to a well described recycling process. If not destined for recycling a cascade of codes can be used from other ashes and slags to the general basket codes for wastes.

3.4

A1040

waste code	waste description	relation sym.	relation description	ex. Notation	HS code	HS description	Conditions
A1040	Wastes having as constituents any of the following: Metal carbonyls, Hexavalent chromium compounds	⊆ HS	is covered by a larger HS code	W = ex. HS	382569	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other wastes from chemical or allied industries	
A1040		⊆ HS	is covered by a larger HS code	W = ex. HS	382590	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other residual products of the chemical or allied industries	

There is no specific HS code that could cover A1040. We need to make use of the general basket codes for waste.

3.5

A1080

waste code	waste description	relation sym.	relation description	ex. Notation	HS code	HS description	Conditions
A1080	Waste zinc residues not included on list B, containing lead and cadmium in concentrations sufficient to exhibit Annex III characteristics	⊆ HS	includes a narrower HS code	ex. W = HS	260800	Zinc ores and concentrates	if Note 2 to Chapter 26 is fulfilled
A1080		≈ HS	resembles a HS code	ex. W = HS W = ex. HS	262019	Slag, ash and residues containing mainly zinc (excl. hard zinc spelter)	if Note 3 to Chapter 26 is fulfilled
A1080		≈ HS	resembles a HS code	ex. W = HS W = ex. HS	262190	Slag and ash, incl. seaweed ash "kelp" (excl. slag, incl. granulated, from the manufacture of iron or steel, ashes and residues containing arsenic, metals or metal compounds and those from the incineration of municipal waste)	(depending on the source of this waste), if in form of slag or ash not fulfilling Note 3 to Chapter 26
A1080		⊆ HS	is covered by a larger HS code	W = ex. HS	382569	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other wastes from chemical or allied industries	otherwise, subheading depending on the source of this waste
A1080		⊆ HS	is covered by a larger HS code	W = ex. HS	382590	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other residual products of the chemical or allied industries	otherwise, subheading depending on the source of this waste

Code A1080 corresponds to HS code 262019, if destined for recycling according to note 3. This HS code is however more broad and not restricted to wastes that contain hazardous concentrations of lead or cadmium. If the waste is a discarded ore or concentrate, not destined for recycling according to note 3, code 260800 can be applied. In other cases a cascade of codes can be used from other ashes and slags to the general basket codes for wastes.

3.6

A1100

waste code	waste description	relation sym.	relation description	ex. Notation	HS code	HS description	Conditions
A1100	Dusts and residues from gas cleaning systems of copper smelters	⊆ HS	is covered by a larger HS code	W = ex. HS	262030	Slag, ash and residues containing mainly copper	if Note 3 to Chapter 26 is fulfilled and if containing mainly copper
A1100		⊆ HS	is covered by a larger HS code	W = ex. HS	262190	Slag and ash, incl. seaweed ash "kelp" (excl. slag, incl. granulated, from the manufacture of iron or steel, ashes and residues containing arsenic, metals or metal compounds and those from the incineration of municipal waste)	if in form of slag or ash not fulfilling Note 3 to Chapter 26
A1100		⊆ HS	is covered by a larger HS code	W = ex. HS	382569	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other wastes from chemical or allied industries	otherwise, subheading depending on the source of this waste
A1100		⊆ HS	is covered by a larger HS code	W = ex. HS	382590	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other residual products of the chemical or allied industries	otherwise, subheading depending on the source of this waste

Gas cleaning waste from copper smelters is a kind of residue mainly containing copper. HS code 262030 can be applied, if the material is destined for copper recycling. In other cases a cascade of codes can be used from other ashes and slags to the general basket codes for wastes.

3.7 A1120

waste code	waste description	ation sym	relation description	ex. Notation	HS code	HS description	Conditions
A1120	Waste sludges, excluding anode slimes, from electrolyte purification systems in copper electrorefining and electrowinning operations	≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262030	Slag, ash and residues containing mainly copper	if Note 3 to Chapter 26 is fulfilled and if containing mainly copper
A1120		ε HS	is covered by a larger HS code	W = ex. HS	382569	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other wastes from chemical or allied industries	otherwise, subheading depending on the source of this waste
A1120		ε HS	is covered by a larger HS code	W = ex. HS	382590	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other residual products of the chemical or allied industries	otherwise, subheading depending on the source of this waste

Copper electro-winning or electro-refining sludge is a kind of residue mainly containing copper. HS code 262030 can be applied, if the material is destined for copper recycling. In other cases a cascade of codes can be used from other ashes and slags to the general basket codes for wastes.

3.8 A1160

waste code	waste description	ation sym	relation description	ex. Notation	HS code	HS description	Conditions
A1160	Waste lead-acid batteries, whole or crushed	≈ HS	resembles a HS code	ex. W= HS W = ex. HS	850790	Plates, separators and other parts of electric accumulators, n.e.s.	if discarded
A1160		≈ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	850710	Lead-acid accumulators of a kind used for starting piston engines	if discarded
A1160		≈ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	850720	Other lead-acid accumulators	if discarded
A1160		ε HS	is covered by a larger HS code	W = ex. HS	854810	Waste and scrap of primary cells, primary batteries and electric accumulators; spent primary cells, spent primary batteries and spent electric accumulators	

There is a nice match between code A1160 and HS code 854810, although the latter is a much broader waste code including wastes from other types of accumulators and batteries. The products codes 850710 and 850720 make no distinction between the use phase or the waste phase of the accumulator when discarded for reuse. In several countries waste for reuse is not considered waste and these two product codes could be applied, although the explanatory notes exclude waste. The same counts for the parts code 850790.

3.9

A1180

A1180	Waste electrical and electronic assemblies or scrap (2) 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, B 1110) (3) (2) This entry does not include scrap assemblies from electric power generation. (3) PCBs are at a concentration level of 50 mg/kg or more.	≠ HS	is covered by a larger HS code	W = ex. HS	84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	if discarded, to be specified
A1180		≠ HS	is covered by a larger HS code	W = ex. HS	85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	if discarded, to be specified
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	741300	Stranded wire, cables, plated bands and the like, of copper (excl. electrically insulated products)	if discarded
A1180		≠ HS	is covered by a larger HS code	ex. W= HS W = ex. HS	90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	if discarded, to be specified
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	91	Clocks and watches and parts thereof	if discarded, to be specified
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	92	Musical instruments; parts and accessories of such articles	if discarded, to be specified
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	93	Arms and ammunition; parts and accessories thereof	if discarded, to be specified
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	94	Furniture; bedding mattresses, mattress supports, cushions and similar stuffed furnishings; lamps and lighting fittings, not elsewhere specified or included; illuminated signs, illuminated name-plates and the like; prefabricated buildings	if discarded, to be specified
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	95	Toys, games and sports requisites; parts and accessories thereof	if discarded, to be specified
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262011	Hard zinc spelter	if note 3 to chapter 26 is fulfilled

A1180	Waste electrical and electronic assemblies or scrap (2) 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) (3) (2) This entry does not include scrap assemblies from electric power generation. (3) PCBs are at a concentration level of 50 mg/kg or more.	≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262019	Slag, ash and residues containing mainly zinc (excl. hard zinc spelter)	if note 3 to chapter 26 is fulfilled
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262030	Slag, ash and residues containing mainly copper	if note 3 to chapter 26 is fulfilled
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262040	Slag, ash and residues containing mainly aluminium	if note 3 to chapter 26 is fulfilled
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262099	Slag, ash and residues containing mainly nickel, niobium or tantalum, tin, titanium, other metals or metal compounds n.e.s.	if note 3 to chapter 26 is fulfilled
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	711291	Waste and scrap of gold, incl. metal clad with gold, and other waste and scrap containing gold or gold compounds, of a kind used principally for the recovery of precious metal (excl. ash containing gold or gold compounds, waste and scrap of gold melted do	
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	711292	Waste and scrap of platinum, incl. metal clad with platinum, and other waste and scrap containing platinum or platinum compounds, of a kind used principally for the recovery of precious metal (excl. ash containing platinum or platinum compounds, waste and	
A1180		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	711299	Waste and scrap of silver, incl. metal clad with silver, and other waste and scrap containing silver or silver compounds, of a kind used principally for the recovery of precious metal (excl. ash, and waste and scrap of precious metals melted down into unw	

The codes for equipment under chapter 85 make no distinction between the use phase of an equipment and its waste phase, or between EEE and WEEE. If the equipment still can be discerned an appropriate code from chapter 85 can be used. In case the waste consists of cables code 741300 is applicable. When the waste is shredded, demounted or the original equipment is not discernible any more, the waste can be classified as a residue containing zinc, copper, aluminium or another metal or compound destined for recycling of this metal. Codes from header 2620 are applicable. Finally if the destination is recycling of precious metals, codes 71129* are to be applied. The general basket code 3825 cannot be used for WEEE. Following the explanatory notes of Chapter 3825, *other wastes from chemical or allied industries* are often “*heterogeneous mixtures which can vary from liquid or semi-solid dispersions in aqueous or non-aqueous media, exhibiting a wide range of viscosity. They are not fit for further use as presented as primary products*”. In conclusion, there are two main drawbacks of the current HS system:

- no distinction can be made between wastes and non wastes;
- there is no ‘catch-all’ code, given that basket codes like 3825 are not applicable.

3.10 A3020

waste code	waste description	ation sym	relation description	ex. Notation	HS code	HS description	Conditions
A3020	Waste mineral oils unfit for their originally intended use	a HS	includes a narrower HS code	ex. W = HS	271099	Waste oils containing mainly petroleum or bituminous minerals (excl. those containing polychlorinated biphenyls [PCBs], polychlorinated terphenyls [PCTs] or polybrominated biphenyls [PBBs])	

Code A3020 matches perfectly with HS code 271099, unless it contains PCBs at a concentration below 50 (or 20) mg/kg. If the oil contains more PCBs it has to be classified under code A3180. If the concentration is less code A3020 can be used. The HS system however uses no threshold values to determine when a product is containing PCBs, if would not allow any PCB-containing oils.

3.11

A3090

waste code	waste description	action sym.	relation description	ex. Notation	HS code	HS description	Conditions
A3090	Waste leather dust, ash, sludges and flours when containing hexavalent chromium compounds or biocides	≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262091	Slag, ash and residues, containing antimony, beryllium, cadmium, chromium or their mixtures (excl. those from the manufacture of iron or steel)	if note 3 to Chapter 26 is fulfilled
A3090		ε HS	is covered by a larger HS code	W = ex. HS	382569	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other wastes from chemical or allied industries	otherwise, subheading depending on the source of this waste
A3090		ε HS	is covered by a larger HS code	W = ex. HS	382590	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other residual products of the chemical or allied industries	otherwise, subheading depending on the source of this waste
A3090		ε HS	is covered by a larger HS code	W = ex. HS	411520	Parings and other waste of leather or of composition leather, not suitable for the manufacture of leather articles; leather dust, powder and flour	

Code A3090 matches HS code 262091 as it is a residue containing chromium, if it is treated to recycle the chromium. Code 262091 is however broader and includes also other metals. If the waste contains biocides instead of chromium, the code cannot be applied. As an alternative for the general basket codes for waste, one could use code 411520, but this code makes no distinction between hazardous and non-hazardous waste, and could be applicable on waste codes from the B-list as well.

3.12

A3100

A3100	Waste paring and other waste of leather or of composition leather not suitable for the manufacture of leather articles containing hexavalent chromium compounds or biocides	ε HS	is covered by a larger HS code	W = ex. HS	051199	Animal products not elsewhere specified or included, excl. bovine semen, products of fish or crustaceans, molluscs or other aquatic invertebrates, dead animals of Chapter 3 unfit for human consumption.	
A3100		ε HS	is covered by a larger HS code	W = ex. HS	411520	Parings and other waste of leather or of composition leather, not suitable for the manufacture of leather articles; leather dust, powder and flour	

Code A3100 represents pieces of leather waste, which is covered by codes 051199 for untreated raw skin and 411520 for treated leather. These codes make no distinction between hazardous and non-hazardous waste, and could be applicable on waste codes from the B-list as well.

3.13

A3110

A3110	Fellmongery wastes containing hexavalent chromium compounds or biocides or infectious substances (note the related entry on annex III B3110)	≈ HS	resembles a HS code	ex. W = HS W = ex. HS	050210	Pigs', hogs' or boars' bristles and waste of such bristles	
A3110		≈ HS	resembles a HS code	ex. W = HS W = ex. HS	050290	Badger and other brush making hair and waste thereof	
A3110		ε HS	is covered by a larger HS code	W = ex. HS	051199	Animal products not elsewhere specified or included, excl. bovine semen, products of fish or crustaceans, molluscs or other aquatic invertebrates, dead animals of Chapter 3 unfit for human consumption.	
A3110		ε HS	is covered by a larger HS code	W = ex. HS	430220	Heads, tails, paws and other pieces or cuttings of tanned or dressed furskins, not assembled	
A3090		ε HS	is covered by a larger HS code	W = ex. HS	382569	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other wastes from chemical or allied industries	otherwise, subheading depending on the source of this waste
A3090		ε HS	is covered by a larger HS code	W = ex. HS	382590	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other residual products of the chemical or allied industries	otherwise, subheading depending on the source of this waste

Fellmongery waste is broader than bristles waste or badger waste, but it is less broad than cuttings of tanned of dressed furskins or than 'animal products not elsewhere specified.

3.14

A3180

waste code	waste description	action sym.	relation description	ex. Notation	HS code	HS description	Conditions
A3180	Wastes, substances and articles containing, consisting of or contaminated with polychlorinated biphenyl (PCB), polychlorinated terphenyl (PCT), polychlorinated naphthalene (PCN) or polybrominated biphenyl (PBB), or any other polybrominated analogues of these compounds, at a concentration level of 50 mg/kg or more. The 50 mg/kg level is considered to be an internationally practical level for all wastes. However, many individual countries have established lower regulatory levels (e.g. 20 mg/kg) for specific wastes.	= HS	includes a narrower HS code	ex. W = HS	271091	Waste oils containing polychlorinated biphenyls [PCBs], polychlorinated terphenyls [PCTs] or polybrominated biphenyls [PBBs]	
A3180		= HS	includes a narrower HS code	ex. W = HS	382482	Mixtures and preparations containing polychlorinated biphenyls "PCBs", polychlorinated terphenyls "PCTs" or polybrominated biphenyls "PBBs"	See general rule 3b if PCBs are contained in other liquids than oils. This and the above mentioned code cover all PCB containing wastes

PCB containing oils can be classified as HS code 271091. If the waste is not an oil HS code 382482 for PCBs can be used directly, if we take into account general rule 3b : When for any reason, goods are prima facie classifiable under two or more headings, classification shall be effected as follows: (b) mixtures, composite goods consisting of different materials or made up of different components shall be classified as if they consisted of the material or component which gives them their essential character, in so far as this criterion is applicable. The PCB-content is the essential character of wastes classified under code A3180.

3.15

A4030

waste code	waste description	action sym.	relation description	ex. Notation	HS code	HS description	Conditions
A4030	Wastes from the production, formulation and use of biocides and phytopharmaceuticals, including waste pesticides and herbicides which are off-specification, outdated, or unfit for their originally intended use. "Outdated" means unused within the period recommended by the manufacturer.	≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	380850	Goods of heading 3808 containing one or more of the following substances: aldrin (ISO); binapacryl (ISO); d-mephedlor (ISO) (toxaphene); captafol (ISO); chlordane (ISO); chlormequat (ISO); chlorobenzilate (ISO); DDT (ISO) (clofenotane (INN), 1,1,1-trich	
A4030		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	380891	Insecticides(excl those of subheading 3808.50)	
A4030		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	380892	Fungicides(excl those of subheading 3808.50)	
A4030		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	380893	Herbicides(excl those of subheading 3808.50)	
A4030		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	380899	Rodenticides(excl those of subheading 3808.50)	
A4030		≡ HS	is covered by a larger HS code	W = ex. HS	382561	Wastes from chemical or allied industries, mainly containing organic constituents (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids)	otherwise, subheading depending on the source of this waste
A4030		≡ HS	is covered by a larger HS code	W = ex. HS	382569	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other wastes from chemical or allied industries	otherwise, subheading depending on the source of this waste
A4030		≡ HS	is covered by a larger HS code	W = ex. HS	382590	Wastes from chemical or allied industries (excl. waste organic solvents, wastes of metal pickling liquors, of hydraulic fluids, brake fluids and anti-freeze fluids, and those mainly containing organic constituents) - Other residual products of the chemical or allied industries	otherwise, subheading depending on the source of this waste

Biocides and phyto-pharmaceuticals are described in more detail in the HS system. These HS codes do not make a distinction between good in the use phase or outdated, unfit or discarded goods. If a detailed code cannot be found, three general basket codes for waste can be used.

3.16

A4130

waste code	waste description	action sym.	relation description	ex. Notation	HS code	HS description	Conditions
A4130	Waste packages and containers containing Annex I substances in concentrations sufficient to exhibit Annex III hazard characteristics	≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	392310	Boxes, cases, crates and similar articles for the conveyance or packaging of goods, of plastics	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	392321	Sacks and bags, incl. cones, of polymers of ethylene	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	392329	Sacks and bags, incl. cones, of other plastics	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	392330	Carboys, bottles, flasks and similar articles, of plastics	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	392340	Spools, cops, bobbins and similar supports, of plastics	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	392350	Stoppers, lids, caps and other closures, of plastics	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	392390	Articles for the conveyance or packaging of goods, of plastics (excl. boxes, cases, crates and similar articles; sacks and bags, incl. cones; carboys, bottles, flasks and similar articles; spools, spindles, bobbins and similar supports; stoppers, lids, caps and other closures)	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	441510	Cases, boxes, crates, drums and similar packings; cable-drums, of wood	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	441520	Pallets, box pallets and other load boards; pallet collars, of wood	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	481910	Cartons, boxes and cases, of corrugated paper or paperboard	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	481920	Folding cartons, boxes and cases, of non-corrugated paper or paperboard	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	481930	Sacks and bags, of paper, paperboard, cellulose wadding or webs of cellulose fibres, having a base of a width of ≥ 40 cm	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	481940	Sacks and bags, incl. cones, of paper, paperboard, cellulose wadding or webs of cellulose fibres (excl. those having a base of a width of ≥ 40 cm, and record sleeves)	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	481950	Packing containers, incl. record sleeves, of paper, paperboard, cellulose wadding or webs of cellulose fibres (excl. cartons, boxes and cases, of corrugated paper or paperboard, folding cartons, boxes and cases, of uncorrugated paper or paperboard, sacks)	
A4130		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	481960	Box files, letter trays, storage boxes and similar articles, of paperboard, of a kind used in offices, shops or the like (excl. packing containers)	

A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	630510	sacks and bags, for the packing of goods, of jute	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	630520	Sacks and bags, for the packing of goods, of cotton	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	630532	Flexible intermediate bulk containers	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	630533	Sacks and bags, for the packing of goods, of polyethylene or polypropylene strip or the like	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	630539	Sacks and bags, for the packing of goods, of man-made textile materials (excl. of polyethylene or polypropylene strip or the like, and flexible intermediate bulk containers)	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	630590	Sacks and bags, for the packing of goods, of textile materials (excl. man-made, cotton, jute or other textile bast fibres of heading 5303)	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	701010	Glass ampoules	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	701020	Stoppers, lids and other closures, of glass	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	701090	Carboys, bottles, flasks, jars, pots, phials and other containers, of glass, of a kind used for the conveyance or packing of goods; preserving jars of glass	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	731010	Tanks, casks, drums, cans, boxes and similar containers, of iron or steel, for any material, of a capacity of >= 50 l but <= 300 l, n.e.s. (excl. containers for compressed or liquefied gas, or containers fitted with mechanical or thermal equipment)	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	731021	Cans of iron or steel, of a capacity of < 50 l, which are to be closed by soldering or crimping	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	731029	Cans of iron or steel, of a capacity of < 50 l, exd those which are to be closed by soldering or crimping	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	830910	Crown corks of base metal	
A4130		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	830990	Stoppers, caps and lids (including crown corks, screw caps and pouring stoppers), capsules for bottles, threaded bungs, bung covers, seals and other packing accessories, of base metal	

The HS system included a large variety of codes describing packaging, split up in different categories based on the material plastics, wood, paper(board), textiles, glass, metals. No distinction is made between packaging and packaging waste, or between packaging of hazardous substances and other packaging.

3.17

B1110

waste code	waste description	action sym.	relation description	ex. Notation	HS code	HS description	Conditions
B1110	Electrical and electronic assemblies: — Electronic assemblies consisting only of metals or alloys — Waste electrical and electronic assemblies or scrap (2) (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 circuitboards, electronic components and wires) destined for direct reuse (3) and not for recycling or final disposal (4) (2) This entry does not include scrap from electrical power generation	≠ HS	is covered by a larger HS code	WV = ex. HS	85	ELECTRICAL MACHINERY AND EQUIPMENT AND PARTS THEREOF; SOUND RECORDERS AND REPRODUCERS, TELEVISION IMAGE AND SOUND RECORDERS AND REPRODUCERS, AND PARTS AND ACCESSORIES OF SUCH ARTICLES	if discarded, to be specified
B1110		≈ HS	resembles a HS code	ex. W= HS WV = ex. HS	741300	Stranded wire, cables, plaited bands and the like, of copper (excl. electrically insulated products)	if discarded
B1110		≈ HS	resembles a HS code	ex. W= HS WV = ex. HS	262011	Hard zinc spelter	if note 3 to chapter 26 is fulfilled
B1110		≈ HS	resembles a HS code	ex. W= HS WV = ex. HS	262019	Slag, ash and residues containing mainly zinc (excl. hard zinc spelter)	if note 3 to chapter 26 is fulfilled

B 1110		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262030	Slag, ash and residues containing mainly copper	if note 3 to chapter 26 is fulfilled
B 1110		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262040	Slag, ash and residues containing mainly aluminium	if note 3 to chapter 26 is fulfilled
B 1110		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	262099	Slag, ash and residues containing mainly nickel, niobium or tantalum, tin, titanium, other metals or metal compounds n.e.s.	if note 3 to chapter 26 is fulfilled
B 1110		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	711291	Waste and scrap of gold, incl. metal clad with gold, and other waste and scrap containing gold or gold compounds, of a kind used principally for the recovery of precious metal (excl. ash containing gold or gold compounds, waste and scrap of gold melted do	
B 1110		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	711292	Waste and scrap of platinum, incl. metal clad with platinum, and other waste and scrap containing platinum or platinum compounds, of a kind used principally for the recovery of precious metal (excl. ash containing platinum or platinum compounds, waste and	
B 1110		≈ HS	resembles a HS code	ex. W= HS W = ex. HS	711299	Waste and scrap of silver, incl. metal clad with silver, and other waste and scrap containing silver or silver compounds, of a kind used principally for the recovery of precious metal (excl. ash, and waste and scrap of precious metals melted down into unw	

Code B1110 is the non-hazardous mirror code for code A1180. The codes for equipment under chapter 85 make no distinction between the use phase of an equipment and its waste phase, or between EEE and WEEE. If the equipment still can be discerned an appropriate code from chapter 85 can be used. In case the waste consists of cables code 741300 is applicable. When the waste is shredded, demounted or the original equipment is not discernible any more, the waste can be classified as a residue containing zinc, copper, aluminium or another metal or compound destined for recycling of this metal. Codes from header 2620 are applicable. Finally if the destination is recycling of precious metals, codes 71129* are to be applied. The general basket code 3825 cannot be used for WEEE. . Following the explanatory notes of Chapter 3825, *other wastes from chemical or allied industries* are often “*heterogeneous mixtures which can vary from liquid or semi-solid dispersions in aqueous or non-aqueous media, exhibiting a wide range of viscosity. They are not fit for further use as presented as primary products*”. In conclusion, there are two main drawbacks of the current HS system:

- no distinction can be made between wastes and non wastes;
- there is no ‘catch-all’ code, given that basket codes like 3825 are not applicable.

3.18

B1250

waste code	waste description	action sym.	relation description	ex. Notation	HS code	HS description	Conditions
B1250	Waste end-of-life motor vehicles, containing neither liquids nor other hazardous components	≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	8705	Special purpose motor vehicles (other than those principally designed for the transport of persons or goods), e.g. breakdown lorries, crane lorries, fire fighting vehicles, concrete-mixer lorries, road sweeper lorries, spraying lorries, mobile workshops a	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	871190	Motorcycles, incl. mopeds, and cycles fitted with an auxiliary motor and side cars for motorcycles (excl. with reciprocating internal combustion piston engine)	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	842710	Self-propelled fork-lift trucks; other works trucks fitted with lifting or handling equipment powered by an electric motor	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	842720	other self-propelled fork-lift trucks; other works trucks fitted with lifting or handling equipment	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	842790	other fork-lift trucks; other works trucks fitted with lifting or handling equipment	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	842911	Self-propelled bulldozers and angledozers, track laying	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	842919	Self-propelled bulldozers and angledozers, on wheels	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	842920	Self-propelled graders and levellers	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	842930	Self-propelled scrapers	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	842940	self propelled tamping machines and road rollers	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	842951	Self-propelled front-end shovel loaders	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	842952	Self-propelled mechanical shovels, excavators and shovel loaders, with a 360° revolving superstructure	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	842959	Self-propelled mechanical shovels, excavators and shovel loaders (excl. self-propelled mechanical shovels with a 360° revolving superstructure and front-end shovel loaders)	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	843010	Pile-drivers and pile-extractors (excl. those mounted on railway wagons, motor vehicle chassis or lorries)	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	843020	Snowploughs and snowblowers (excl. those mounted on railway wagons, motor vehicle chassis or lorries)	if discarded
B1250		≡ vr(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	843031	Self-propelled coal or rock cutters and tunnelling machinery (excl. hydraulically operated self-advancing supports for mines)	if discarded

B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	843041	Self-propelled boring or sinking machinery for boring earth or extracting minerals or ores (excl. those mounted on railway or tramway wagons, motor vehicle chassis or lorries and tunnelling machinery)	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	843050	Self-propelled earth-moving machinery, n.e.s.	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	843311	powered mowers for lawns, parks or sports grounds, with the cutting device rotating in a horizontal plane	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	843319	other mowers for lawns, parks or sports-grounds	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	843320	Other mowers, including cutter bars for tractor mounting	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	843330	Haymaking machinery (excl. mowers)	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	843351	Combine harvester-threshers	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	843353	Root or tuber harvesting machines	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	843359	Other harvesting machinery, excl. combine harvester-threshers, other threshing machinery, root or tuber harvesting machines	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	843680	Other agricultural, horticultural, forestry, poultry-keeping or bee-keeping machinery, including germination plant fitted with mechanical or thermal equipment, excl. poultry incubators and brooders, machinery for preparing animal feeding stuffs	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	870110	Pedestrian-controlled agricultural tractors and similar tractors for industry (excl. tractor units for articulated lorries)	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	870120	Road tractors for semi-trailers	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	870130	Track-laying tractors (excl. pedestrian-controlled)	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	870190	Tractors (other than tractors of heading 87.09), excl. pedestrian controlled tractors, road tractors for semi-trailers, track-laying tractors	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	870210	Motor vehicles for the transport of >= 10 persons, incl. driver, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine"	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	870290	Motor vehicles for the transport of >= 10 persons, incl. driver, with spark-ignition internal combustion piston engine	if discarded
B1250		≡ vv(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W= ex. HS	870310	Vehicles specially designed for travelling on snow, golf cars and similar vehicles	if discarded

B1250		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870321	Motor cars and other motor vehicles principally designed for the transport of persons, incl. station wagons and racing cars, with spark-ignition internal combustion reciprocating piston engine of a cylinder capacity ≤ 1,000 cm ³	if discarded
B1250		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870322	Motor cars and other motor vehicles principally designed for the transport of persons, incl. station wagons and racing cars, with spark-ignition internal combustion reciprocating piston engine of a cylinder capacity > 1,000 cm ³ but ≤ 1,500 cm ³	if discarded
B1250		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870323	Motor cars and other motor vehicles principally designed for the transport of persons, incl. station wagons and racing cars, with spark-ignition internal combustion reciprocating piston engine of a cylinder capacity > 1,500 cm ³ but ≤ 3,000 cm ³	if discarded
B1250		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870324	Motor cars and other motor vehicles principally designed for the transport of persons, incl. station wagons and racing cars, with spark-ignition internal combustion reciprocating piston engine of a cylinder capacity > 3,000 cm ³	if discarded
B1250		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870331	Motor cars and other motor vehicles principally designed for the transport of persons, incl. station wagons and racing cars, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" of a cylinder capacity ≤ 1,500 cm ³	if discarded
B1250		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870332	Motor cars and other motor vehicles principally designed for the transport of persons, incl. station wagons and racing cars, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" of a cylinder capacity > 1,500 cm ³ but not exceeding 2,500 cc	if discarded
B1250		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870333	Motor cars and other motor vehicles principally designed for the transport of persons, incl. station wagons and racing cars, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" of a cylinder capacity > 2,500 cm ³	if discarded
B1250		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870390	other motor cars and other vehicles principally designed for the transport of persons	if discarded
B1250		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870410	Dumpers for off-highway use	if discarded
B1250		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870421	Motor vehicles for the transport of goods, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" of a gross vehicle weight ≤ 5 t	if discarded
B1250		≡ w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870422	Motor vehicles for the transport of goods, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" of a gross vehicle weight > 5 t but ≤ 20 t	if discarded

B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870423	Motor vehicles for the transport of goods, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" of a gross vehicle weight > 20 t	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870431	Motor vehicles for the transport of goods, with spark-ignition internal combustion piston engine, of a gross vehicle weight <= 5 t	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870432	Motor vehicles for the transport of goods, with spark-ignition internal combustion piston engine, of a gross vehicle weight > 5 t	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870490	Motor vehicles for the transport of goods, with engines other than internal combustion piston engine (excl. dumpers for off-highway use of subheading 8704.10 and special purpose motor vehicles of heading 8705)	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870510	Crane lorries (excl. breakdown lorries)	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870520	Mobile drilling derricks	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870530	Fire fighting vehicles (excl. vehicles for transporting persons)	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870540	Concrete-mixer lorries	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870590	Special purpose motor vehicles (excl. those principally designed for the transport of persons or goods, and concrete-mixer lorries, fire fighting vehicles, mobile drilling derricks, crane lorries)	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870911	Electrical vehicles, not fitted with lifting or handling equipment, of the type used in factories, warehouses, dock areas or airports for short distance transport of goods, incl. tractors for railways station platforms	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	870919	Other vehicles, not fitted with lifting or handling equipment, of the type used in factories, warehouses, dock areas or airports for short distance transport of goods, incl. tractors for railways station platforms	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	871000	Tanks and other armoured fighting vehicles, motorised, whether or not fitted with weapons, and parts of such vehicles, n.e.s.	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	871110	Motorcycles, incl. mopeds, and cycles fitted with an auxiliary motor, with reciprocating internal combustion piston engine of a cylinder capacity <= 50 cm ³	if discarded

B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	871120	Motorcycles, incl. mopeds, with reciprocating internal combustion piston engine of a cylinder capacity > 50 cm ³ but <= 250 cm ³	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	871130	Motorcycles, incl. mopeds, with reciprocating internal combustion piston engine of a cylinder capacity > 250 cm ³ but <= 500 cm ³	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	871140	Motorcycles, incl. mopeds, with reciprocating internal combustion piston engine of a cylinder capacity > 500 cm ³ but <= 800 cm ³	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	871190	Motorcycles, incl. mopeds, with reciprocating internal combustion piston engine of a cylinder capacity > 800 cm ³	if discarded
B 1250		a w(HS)	includes a narrower HS code, if the product is a waste	ex. W= HS W = ex. HS	871390	Carriages for disabled persons, motorised or otherwise mechanically propelled (excl. specially designed motor vehicles and bicycles)	if discarded

B1250 covers all end-of-life vehicles which are duly depolluted. No such code exists in the HS system, but it contains a very large variety of vehicles and self-propelled equipment that can be considered as a specialised vehicle. In some codes distinction can be made between 'used' and new, but no distinction can be made between vehicles in the use phase, as second-hand or in the waste phase.

3.19 **B3140**

waste code	waste description	relation sym	relation description	ex. Notation	HS code	HS description	Conditions
B3140	Waste pneumatic tyres, excluding those destined for Annex IVA operations	= HS	is covered by a larger HS code	W = HS	401220	Used pneumatic tyres of rubber	if discarded

Code B3140 covers all pneumatic tyres, but only if destined for recycling. The HS code makes no distinction between tyres for reuse, recycling or disposal. As all pneumatic tyres are made of elastomers or different types of rubber, the limitation of the HS code to rubber tyres has no impact on the convergence with the Basel code.

Importance of the selected wastes

For each waste code mentioned by the UK and Peru this chapter describes its importance for international trade, for compliance with the Basel Convention and for effective inspection on the latter in which Customs offices can play a key role.

Two problems occur regarding export of the proposed Basel waste codes:

- Difficulties to discern hazardous with non- hazardous waste
- Difficulties to discern waste with second hand goods

In the table here under, these characteristics are assigned to each waste code, treated in this project.

Code	Waste	Characteristics
A1010 A1020 A1030 A1040	Metal waste and scrap	Distinction to be made between hazardous and non- hazardous
A1080 A1100 A1120	Metal waste residues	Distinction to be made between hazardous and non- hazardous
A1160	Lead accumulators	Distinction to be made between waste and second-hand goods
A1180	WEEE	Distinction to be made between waste and second-hand goods
A3020	Oil waste	Distinction to be made between hazardous and non- hazardous
A3090; A3100; A3110	Leather & Fellmongery waste	Distinction to be made between hazardous and non- hazardous
A4130	Packaging waste	Distinction to be made between hazardous and non- hazardous
A4030	Biocides/ pharmaceuticals	Distinction to be made between waste and second-hand goods (e.g.obsolete pesticides).
B1110	WEEE	Distinction to be made between waste and second-hand goods
B1250	End-of-life vehicles	Distinction to be made between waste and second-hand goods
B3140	Tyres and rubber scrap	Distinction to be made between waste and second-hand goods

Table 1 : Characteristics of selected Basel waste codes

Regarding the distinction to be made between waste and second-hand goods, an overview of the difference of waste (and scrap) and end-of-life/spent equipment will be clarifying.

Waste and scrap:

‘waste’ or ‘scrap’ means any substance or object which the holder discards or intends or is required to discard which belongs to one or more of the following categories:

- products which are off-specification in both their country of origin and their country of destination;

- products which are obsolete in both their country of origin and their country of destination;
- materials [parts] which are contaminated or soiled as the result of deliberate or accidental actions;
- unusable parts (e.g. end-of-life batteries, equipment containing exhausted catalysts, etc.);
- any equipment the use of which is prohibited by law [both in its country of origin and its country of destination].
- production or consumption residues not otherwise specified above;
- Any equipment or parts which is discarded because no further use is intended;
- any equipment the characteristics of which are a combination of some of the above categories.

Products intended for re-use (without checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing) as second-hand goods, used replacement parts or reconstructable parts are excluded from waste. However, products containing only some parts that can be re-used directly are to be regarded as a whole and classified as end-of-life products.

End-of-life/spent equipment:

'End-of-life' or 'spent' equipment refers to any equipment which, in at least its country of export or its country of import, is in such degraded or worn-out condition that it would be very difficult to repair or rebuild, and the cost of rebuilding it would be markedly higher than the market value both in its country of origin and its country of destination of equivalent functional equipment. In its existing condition such equipment can no longer be used properly and entirely safely in accordance with the standards and/or legislation in force, both in its country of origin and its country of destination, and to perform the essential functions for which it was originally designed¹.

The main problem consists in discerning the **hazardous with non-hazardous** state of the waste, for which almost no visual distinction can be made. Often, these wastes have corresponding entries in green and amber list. Nevertheless, even if the distinction cannot be made visible in the HS headings, it would be beneficial for waste shipment enforcement to link Basel waste codes univocally to HS waste codes, and thus allow reference to HS when defining waste shipment enforcement priorities.

4.1

Quantitative analysis

Data reported by the Partners in the frame of the Basel Convention are published on the Secretariats website, on <http://archive.basel.int/natreporting/datasrces/index.html>

¹ It may be said that equipment is fit to perform its essential functions when any user can use it in objectively normal conditions, i.e. conditions under which:

- the equipment presents no uncontrollable danger;
- the equipment can be used in practice in a way corresponding to the purposes for which it was designed, manufactured and placed on the market;
- the equipment satisfies the specific needs of its users [both in its country of origin and its country of destination]

We analysed the reporting on export, for the year 2009, to get an impression on quantities and importance in waste trade of the different selected materials. The reporting is however incomplete:

- Not all Parties have reported the exported quantities in part II, section A, table 6;
- Only the wastes falling under the notification procedure imposed by article 4.2 f, article 6 and annex V of the Convention are included;
- Not all Parties included non-hazardous waste shipments in the reporting, even if they were submitted to notification procedures;
- Data reported is often incomplete and lack the necessary identifying codes from annex VIII.

Based on the available data, we filled in the missing codes and attributed codes from annex VIII to incomplete records, based upon the description of the waste or its hazards, the European LoW codes when mentioned, the Y-codes when mentioned and parallels with complete records. About 17,5% of all reported quantities could not be linked to codes from annex VIII and is labelled as 'not specified'.

Metals and lead acid accumulators represent large waste streams, representing together about 20% of the total shipped and reported waste quantities. Mineral oil is important as well. ELV is scarcely reported and waste tyres are not reported, although they constitute large export streams. But they are not always adequately covered by the Convention, or they are shipped illegally, or as green listed waste, or as second-hand products and not as a waste. The importance of the export market for ELV and waste tyres is shown by COMEXT/EUROSTAT statistics:

- The 27 Member States of the European Union reported in 2009 a total of 3.740.299 tonnes of "used motor vehicles" being exported. Part of it will definitely be ELV.
- The 27 Member States of the European Union reported in 2009 a total of 215.475 tonnes of "used rubber tyres" being exported. Part of it will definitely be waste tyres.

Leather and fellmongery waste is not reported in the Basel Convention data. Packaging is scarcely reported as such.

Waste streams	metric tonnes	%
WEEE	78.622	1,10
biocides and phytopharma	38.336	0,54
ELV	27.929	0,39
lead acid accu	705.716	9,89
leather and fellmongery		0,00
metals	781.419	10,95
mineral oil	374.127	5,24
packages	2.688	0,04
PCB	84.377	1,18
tyres		0,00
sum	2.093.213	29,33
not specified	1.262.216	17,69
total reported export	7.136.461	100,00

Table 2 Waste export reported by Parties of the Basel Convention for 2009 (source: Secretariat of the Basel Convention 2012b, own compilation)

Not mentioned in the groups above to be examined, but nevertheless important regarding waste shipment, are :

	metric tonnes	%
Y46 ; collected from households	900.114	12,61
Y47 ; residues househ. waste incin.	687.135	9,63
A2050 ; asbestos	332.479	4,66
A4040 ; wood preserving	228.592	3,20
A4090 ; acids and bases	205.804	2,88
A4060 ; oils/water, emulsions	197.932	2,77
A2030 ; catalysts	149.204	2,09
A4100 ; cleaning of indus. off-gases	146.807	2,06
A1050 ; precious metal incin. PCB	145.268	2,04

Table 3 Waste export reported by Parties of the Basel Convention for 2009 (source: Secretariat of the Basel Convention 2012b, own compilation)

An overview of all totals is included in annex. The table with all 14504 records is added as a separate excel file.

4.2 ***A1010, A1020, A1030, A1040: Metal wastes/compounds***

4.2.1 **Material description**

- *A1010 Metal wastes and waste consisting of alloys of any of the following: Antimony, Arsenic, Beryllium, Cadmium, Lead, Mercury, Selenium, Tellurium, Thallium but excluding such wastes specifically listed on list B.*
- *A1020 Waste having as constituents or contaminants, excluding metal waste in massive form, any of the following: Antimony; antimony compounds, Beryllium; beryllium compounds, Cadmium; cadmium compounds, Lead; lead compounds, Selenium; selenium compounds, Tellurium; tellurium compounds*
- *A1030 Wastes having as constituents or contaminants any of the following: Arsenic; arsenic compounds, Mercury; mercury compounds, Thallium; thallium compounds*
- *A1040 Wastes having as constituents any of the following: Metal carbonyls, Hexavalent chromium compounds*

4.2.2 **Occurrence**

Different types of metal waste and scrap are often mixed together in one lot, which could give rise to illegal export of some types of metal waste to non-OECD countries in breach with the export ban. Additionally, differentiating hazardous and non-hazardous metal waste and scrap can be difficult in some cases. It is important to know the final treatment of the non-hazardous metal waste and scrap in the country of destination, to evaluate the environmentally sound management of it.

Export of hazardous metal waste for recovery from EU is forbidden to non-OECD countries and to non EFTA+Basel countries for disposal.

4.2.3

Risks

Sorting operations can be harmful to the workforce when they are performed by the informal sector. In some countries, workers are in close contact with contaminated waste and fumes resulting from the burning-off of the non-metallic components in open pits. It can happen during the separation of copper from electrical and electronic cabling, a process that is banned in many developed countries because of the potential release of toxic pollutants including dioxins (Arcadis & Bio Intelligence Service; 2010).

4.3

A1080 & A1100: residues and waste from metal production

4.3.1

Material description

- *A1080: Waste zinc residues not included on list B, containing lead and cadmium in concentrations sufficient to exhibit Annex III characteristics*
- *A1100: Dusts and residues from gas cleaning systems of copper smelters*

Typical residues and wastes from the non-ferrous metal industry copper and lead production are slag, flue-gas dust, and dross. Recovery possibilities vary from country to country and depend e.g. on the quality of slag. Ashes and slag often possess positive market value and can be reused as a raw material in the construction sector, cement production or even as a fertilizer for agricultural use.

Ashes and slag can be contaminated with heavy metals, oxyanions and inorganic salts. Production of non-ferrous metals generates a relatively high fraction of hazardous waste compared to ferrous metals, mainly as lead slag and sludge from zinc production.

4.3.2

Occurrence

Incentives for importing and exporting can be found in economical, legislative and technical factors. For the different types of ashes and slag with positive market value, economic forces of demand and recovery efficiency will drive shipments. Landfill fees and differentiated incineration taxes between countries play an additional role.

Export of hazardous residues and waste from metal production is forbidden to non-OECD countries for recovery and to non EFTA+Basel countries for disposal. One major challenge for inspection is the difficult distinction between green listed wastes and (contaminated) amber listed wastes. Illegal shipments of amber codes listed wastes include for example copper ashes and residues and residues containing metals, improperly shipped as Green waste without notification (ETC/RWM, 2008). The distinction between hazardous and non-hazardous character is depending on the source of the waste, while in practice the waste is often shipped through traders without direct link to the original generator.



Umweltbundesamt GmbH, Spittelauer Lnder 5, 1090 Vienna, Austria

Figure 1 : Aluminium skimmings with 75% metallic Al



Umweltbundesamt GmbH, Spittelauer Lnder 5, 1090 Vienna, Austria

Figure 2 : Zinc ash

4.3.3

Risks

Several preconditions and technical limitations can lead to lower recovery and recycling opportunities thereby also increasing the chance for ashes and slag to end up in landfills.

Flue-gas dust that contains harmful substances and solid wastes from flue-gas cleaning are predominantly disposed of underground. In many EU member countries, landfilling – usually on hazardous waste sites – is the norm. In developing countries, however, those residues may be tipped in non-protected landfills, with harmful leakage as a consequence.

4.4

A1160: Waste lead-acid batteries, whole or crushed

4.4.1

Material description

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

This waste stream includes spent lead accumulators and batteries as well as their scrap and different components. Lead-acid batteries are secondary wet cell batteries, meaning they can be recharged for many uses and they contain liquid. They are the most widely used rechargeable batteries in the world. A lead-acid accumulator is made of lead electrodes with dilute sulphuric acid as the electrolyte. Lead-acid batteries (made of several lead-acid accumulators) are used in certain specialist applications, in particular in the automotive industry.

Since lead accumulators include lead and sulphuric acid, discarded lead accumulators are considered as hazardous waste because they exhibit the toxic characteristics of lead, and the corrosive characteristics of the sulphuric acid.

4.4.2

Occurrence

Regarding the EU situation, used lead-acid batteries are frequently traded between Member States. Batteries are traded from Member States without recycling facilities to Member States with such facilities. A significant amount of used lead-acid batteries generated in the EU is also shipped to developing countries, where recycling operations are often not managed in an environmentally sound manner. Although the export of used lead-acid batteries to non-OECD countries is forbidden, illegal export is known to happen. Often lead accumulator waste can be found as a cargo in second-hand cars, or mixed up with metal waste scrap (Arcadis & Bio Intelligence Service; 2010). Kojima et al (2011) found that since early 2005 a sharp increase in nominal exports of second-hand lead-acid battery waste has been exported from Japan to Vietnam and to Hong Kong. Although it was not clear if the exported items were reused or not, a substantial amount of lead-acid batteries with Japanese inscriptions were found in a recycling factory in Guangzhou, China in 2007. This precedent shows the thin line between waste and second hand goods and its difficulties to unmask illegal trade.



Umweltbundesamt GmbH, Spittelauer Lander 5, 1090 Vienna, Austria

Figure 3: Lead accumulator



Umweltbundesamt GmbH, Spittelauer Lander 5, 1090 Vienna, Austria

Figure 4: Lead accumulator waste



Umweltbundesamt GmbH, Spittelauer Lnder 5, 1090 Vienna, Austria

Figure 5: Lead grids from accumulators



ARCADIS, schma directeur de gestion des dchets solides au niveau de l'agglomration de Mascara Algrie (2008)

Figure 6: Informal lead accumulator recycling in Algeria



Figure 7: Lead accumulators as a cargo inside a second-hand car ready for export

4.4.3

Risks

Used lead-acid batteries are often shipped over long distances for recycling, typically from the industrialised countries that produce, use, and then collect the spent batteries for reprocessing. Currently, used lead-acid battery recycling occurs in almost every city in the developing world, and even in some countries in rapid transition. In many cases the local recycling operations are not managed in an environmentally sound manner and release lead contaminated waste into the local environment and ecosystems in critical quantities².

² In 2008, the Blacksmith Institute estimated that over 12 million people were affected by lead contamination from the processing of used lead-acid batteries throughout the developing world.

Exposure to lead can cause serious health problems, especially in young children (ETC/CSP; 2012).

4.5 **A1180 and B1110: Electrical and electronic assemblies**

4.5.1 **Material description**

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

B1110 Electrical and electronic assemblies:

- *Electronic assemblies consisting only of metals or alloys;*
- *Waste electrical and **electronic assemblies or scrap**³ (including printed circuit boards) not containing components such as accumulators and other batteries included on list A, mercury-switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors, or not contaminated with Annex I constituents (e.g. cadmium, mercury, lead, polychlorinated biphenyl) or from which these have been removed, to an extent that they do not possess any of the characteristics contained in Annex III (note the related entry on list A, A1180);*
- *Electrical and electronic assemblies (including printed circuit boards, electronic components and wires) destined for **direct re-use**⁴ and not for recycling or final disposal⁵;*

Electrical and electronic equipment (EEE) is equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields falling under the categories set out in Annex IA and designed for use with a voltage rating not exceeding 1000 Volt for alternating current and 1500 Volt for direct current (definition according to the WEEE Directive).

Waste electric and electronic equipment occurs in the forms of: small and large household appliances, IT and telecommunications equipment, consumer equipment, lighting equipment, electrical and electronic tools, toys, leisure and sports equipment, medical devices (with the exception of all implanted and infected products), monitoring and control instruments and automatic dispensers.

Possible contaminants can be:

- polychlorinated biphenyls (PCB) containing capacitors ;
- mercury containing components, such as switches or backlighting lamps;
- batteries;

³ This entry does not include scrap from electrical power generation.

⁴ Re-use can include repair, refurbishment or upgrading, but not major reassembly

⁵ In some countries these materials destined for direct re-use are not considered wastes

- plastic containing brominated flame retardants;
- asbestos waste and components which contain asbestos;
- cathode ray tubes;
- chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC) or hydrofluorocarbons (HFC), hydrocarbons (HC);



Umweltbundesamt GmbH, Spittelauer Lander 5, 1090 Vienna, Austria

Figure 8: Waste printed circuit boards



Umweltbundesamt GmbH, Spittelauer Lander 5, 1090 Vienna, Austria

Figure 9: Shredded printed circuit boards



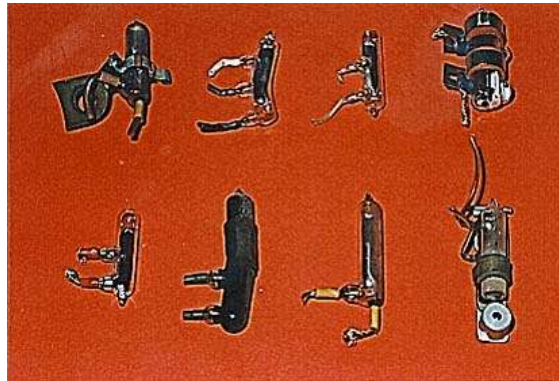
Umweltbundesamt GmbH, Spittelauer Lander 5, 1090 Vienna, Austria

Figure 10: Discarded trafo, containing PCB oil



Umweltbundesamt GmbH, Spittelauer Lander 5, 1090 Vienna, Austria

Figure 11: Cathode ray tubes



Umweltbundesamt GmbH, Spittelauer Lander 5, 1090 Vienna, Austria

Figure 12: Switches containing mercury



Umweltbundesamt GmbH, Spittelauer Lander 5, 1090 Vienna, Austria

Figure 13: Electromotor with PCB capaciator

4.5.2

Occurrence

WEEE is often exported to non OECD countries, both legally and illegally, for manual disassembly and recovery of the more valuable parts, discarding the other. WEEE is also often exported as, often low grade, second-hand good. Hazardous WEEE and non-hazardous WEEE may be mixed in one lot, which could give rise to illegal export to non-OECD countries in breach with the export ban (Verma, N.; 2010).

Export

It is very difficult to follow transboundary shipments of WEEE. It is estimated that between 50 and 80 per cent of collected e-waste is being exported in developed countries each year (Lundgren, K, 2012). Much e-waste, however, is unaccounted for. It is either discarded into the general waste stream or can be illegally exported, e.g. stuffed in exported (end of life) vehicles⁶ Furthermore, it can be difficult to discern when a used electrical or electronic item is waste or just a second-hand product.

For 2007, it has been possible to identify about 100 000 tonnes of WEEE with hazardous substances, exported from the European Economic Area . Table 4 shows this amount broken down.

European LoW code	Total amount (ton)	Description
160215	49 911	WEEE — hazardous components removed from discarded equipment
200135	15 174	Discarded electrical and electronic equipment other than those mentioned in 200121 and 200123, containing hazardous components
200121	10 731	Fluorescent tubes and other mercury-containing waste
200123	10 221	Discarded equipment containing CFC
160213	9 065	Discarded equipment containing hazardous components other than those mentioned in 160209 to 160212
160211	8 846	Discarded equipment containing CFC, chlorofluorocarbon (HCFC), hydrofluorocarbon (HFC)
WEEE total	103 948	

Table 4 : –Exported WEEE, containing hazardous substances in the EEA countries related to activity in the European Waste List (2007) (ETC/SCP; 2012)

WEEE is classified as hazardous waste under the Basel Convention. This means that shipments between the Parties of the Basel Convention need to comply with a number of conditions and are subject to prior written notification from the exporting country and prior written consent from the importing and, if appropriate, transit countries.

⁶ Belgian customs authorities assume that 90% of illegal WEEE shipments are conducted by co-loading e-waste into used cars (Öko-Institut et al. 2010).

IMPORT

Main importers of WEEE are mainly identified in Asian countries, such as China, India, and Pakistan, and in some West African countries, such as Ghana and Nigeria. It is estimated that China receives the highest proportion of all e-waste – about 70 per cent and rising. A common e-waste trade system in South-East Asia includes shipments received in China, rebuilt or refurbished mainly in the Guangzhou region, and then re-exported to other countries including Cambodia and Vietnam through the Dongxin border area (Ni & Zeng, 2009).⁷

The study “Where are WEEE in Africa” by the Secretariat of Basel Convention (2011b) analysed imported used streams in West Africa. Un-repairable. The table here under focuses on the final WEEE part of imported used electronic equipment. In the case of Ghana, about 22,500 tonnes of final un-repairable e-waste was generated in 2010.

Country	Year	Imports of used EEE		Non-functioning imported used EEE		
		Tonnes/ year	Thereof non functioning	Tonnes/ year	Local repair	Unrepairable
Ghana	2009	150 500	30%	45 000	50%	50%
Nigeria	2010	420 000	30%	126 000	50%	50%
Benin	2009	4 800	Na	Na	Na	2 400
Côte d'Ivoire	2009	12 000	Na	Na	Na	6 000

Table 5: Quantitative data for EEE in Benin, Côte d'Ivoire, Ghana, Liberia⁸ and Nigeria related to used EEE imports (based on Secretariat of the Basel Convention 2011b)

An analysis in 2010 of containers of used EEE imported into Nigeria reveal that almost 75% of the containers from Europe, approximately 15% from Asia, 5% from African ports (mainly Morocco) and 5% from North America. A similar distribution could be observed in Ghana, where 85% of used EEE imports originated in Europe, 4% in Asia, 8% in North America, and 3% from other destinations. Results suggest that, while Europe still dominates the trade, Asia is slowly becoming more important as an exporting region of used EEE to Africa.

Ghana and Nigeria reveal an organized informal sector with medium to high volumes of processed materials (e.g. steel, aluminium and copper). WEEE are manually dismantled with simple tools like hammers, screwdrivers, chisels etc. Open-burning is widely used to recover those metals, such as copper, steel, and aluminium from wires and other EEE components. Residual fractions such as CRT-glass and plastics are mainly dumped in open unprotected landfills. Depollution, e.g. degassing CFCs and HCFCs from cooling and freezing appliances, does not take place, due to a lack of appropriate treatment infrastructure (Secretariat of the Basel Convention 2011b).

⁷ The town of Guiyu is probably the largest e-waste recycling site in the world; it employs about 100,000 people in this activity, representing about 80 per cent of the town's population (Ni & Zeng, 2009).

4.5.3

Risks

Environmental and health risks may result from the disposal of e-waste in countries which do not have the capacity to manage these wastes in a controlled manner, for example if the waste is subject to open-air burning (to recover metals from waste fractions with a high organic content) or if the waste is landfilled without appropriate protection measures (Secretariat of the Basel Convention; 2012a).

The dusts and the surrounding ambient air may pose an inhalation hazard (e.g. from polycyclic aromatic hydrocarbons ([PAHs]) and dermal exposure hazard to workers, as well as the risk of environmental contamination. Open-air storage raises concerns regarding the possibility of lead and other substances leaching out into the environment. In addition, with lack of access to running water, toxins are transmitted orally via people's hands when eating and smoking.

Overall, human health risks from e-waste include breathing difficulties, respiratory irritation, coughing, choking, pneumonitis, tremors, neuropsychiatric problems, convulsions, coma and even death (Lundgren, K, 2012) Increased levels of polychlorinated biphenyls (PCBs) and polybrominated diphenyl ethers (PBDEs) found in breast milk samples in Accra, Ghana, were also linked to informal e-waste recycling activities (Secretariat of the Basel Convention 2011b)..



Figure 4 : E-waste incineration and metal recycling on a dumpsite in Ghana (2009)
(source: Arcadis & Bio Intelligence; 2010, Rudy Daems 2009)

4.6

A3020: Waste mineral oils unfit for their originally intended use

4.6.1

Material description:

- *A3020: Waste mineral oils unfit for their originally intended use*

Waste oil means any mineral or synthetic lubrication or industrial oil which has become unfit for the use for which it was originally intended, such as used combustion engine oil and gearbox oil, lubricating oil, oil for turbines and hydraulic oil (according to the European Waste Framework Directive). Oil can be contaminated with coolants, organo-halogens, PCB's, PAC's, heavy metals and other chemicals. The entry A3020 represents these contaminated oils.

4.6.2

Occurrence

Most shipped oil comes from waste engine, gear and lubricating oils. Almost all of this waste is exported as R9 treatment (oil re-refining or other uses of oil). Other major oil waste includes bilge oils, and oils from other navigation, which is mainly incinerated with energy

recovery (R1). Furthermore, there are waste hydraulic oils. Almost all of these are mineral based non-chlorinated hydraulic oils, which are used for oil-refining or reuses of oil (R9).

Export of oil waste from EU for disposal is forbidden except to EU Member States + Iceland, Norway and Switzerland⁸. The export for recovery of hazardous oil waste (e.g. A3020) from EU is forbidden to non-OECD countries. Waste oil may be confused with fresh oil during shipment. These contaminated oils cannot be discerned de visu from other oils, which favours illegal export. Waste oil may be shipped in non-depolluted end-of-life vehicles or second-hand cars. It may be shipped as scrap in oil filters or as wood waste in absorption materials.

4.6.3

Risk

Waste oil is high calorific and therefore attractive as a substandard energy source for heating of greenhouses or industrial installations. Incineration of waste oil requests adapted installations, and is costly.

Treatment and destruction of PCB-containing oil requests specific high temperature incineration processes to avoid the generation of dioxins. Mix-up has occurred with animal and vegetable oil, polluting the food chain (as occurred in Belgium in 1999). Especially when the oil is polluted with PCB the risks for public health can be considerable. High quality regeneration or recycling of waste oil can be hindered by mixing waste motor oil with brake fluids and heat exchange liquids during car maintenance (Arcadis & Bio Intelligence Service; 2012).

4.7

A3090, A3100, A3110: leather and fellmongery wastes

4.7.1

Material description

- *A3090 Waste leather dust, ash, sludges and flours when containing hexavalent chromium compounds or biocides (note the related entry on list B, B3100)*
- *A3100 Waste paring and other waste of leather or of composition leather not suitable for the manufacture of leather articles containing hexavalent chromium compounds or biocides (note the related entry on list B, B3090)*
- *A3110 Fellmongery wastes containing hexavalent chromium compounds or biocides or infectious substances (note the related entry on list B, B3110)*

The main hazardous substance of leather and fellmongery wastes is hexavalent chromium. Hexavalent chromium (also called chromium-6) is one form of the metallic element chromium. It is generally produced by industrial processes. Next to leather tanning, the chemical is also used for chrome plating and the production of stainless steel as well as wood preservation, textile dyes and pigments.

Chromium (VI) is not used intentionally in the production of leather but may be formed within the leather by oxidation of chromium (III) used for the tanning of the leather. The mechanisms of the formation of chromium (VI) in the leather are today well known and measures for prevention of the formation of chromium (VI) in measurable concentrations have been developed and implemented in most tanneries in the EU.

⁸ EFTA countries which are also parties to the Basel Convention.

It is known that only 20% of wet salted hides/skins are converted into commercial leather, while 25% becomes chromium-containing leather waste (CCLW). In many places, large quantities of solid leather wastes are disposed by landfill. In past decades, a lot of effort has been made to study treatment options for leather and fellmongery wastes, including isolation of protein products from CCLW. The CCLW mainly consists of collagen and Cr(III) complexes, which could be treated to give the potential resources of collagen protein and chromium. Unfortunately, most of these processes reported bring about new residues during treatment, and currently no state of the art treatment method is utilized. Combustion with energy recuperation is currently the best available technique, although the problem is the high content of moisture (Famielec, et al; 2011 & Changdao et al; 2003).

4.7.2 Occurrence

No clear information can be found on the international trade of leather and fellmongery wastes. Leather and fellmongery waste is not reported in the most recent Basel Convention data (export of hazardous wastes and other wastes in 2009, as provided by Parties, as at 31 August 2011).

The major difficulty in its export process, is its distinction between hazardous and non-hazardous tannery waste (a major part of the leather by products are non-tanned waste, which has no hazardous characteristics).

4.7.3 Risks

Hexavalent chromium is a known human carcinogen when it is inhaled, and can pose a serious health risk to workers in industries where it is commonly used. Although the potential health risk of hexavalent chromium in drinking water is a growing concern, not enough scientific evidence is yet available to confirm the actual risk. Extractable chromium (VI) from shoes and other articles of leather represents a risk for the development of contact allergy to chromium for the consumers (Danish Environmental Protection Agency; 2012).

In absence of combustion with energy recuperation, tannery waste is dumped on (uncontrolled) landfills, posing serious threats to the environment.

4.8 A3180: waste containing PCB or other polybrominated analogues

4.8.1 Material description

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

The 50 mg/kg level is considered to be an internationally practical level for all wastes. However, many individual countries have established lower regulatory levels (e.g. 20 mg/kg) for specific wastes.

PCBs are aromatic compounds formed in such a manner that the hydrogen atoms on the biphenyl molecule (two benzene rings bonded together by a single carbon-carbon bond) may be replaced by up to 10 chlorine atoms. In theory there are 209 congeners, although only about 130 congeners have actually been found in commercial chemical formulations.

PCTs also constitute a group of halogenated hydrocarbons. They are very similar in chemical structure to PCBs except that they contain three phenyl rings instead of two. Therefore, they can have up to 14 chlorine atoms attached. The number of possible PCT congeners is very large; however, only a few occur in commercial chemical formulations. PCTs and PCBs have very similar chemical and physical properties.

PBBs are the bromine analogues of PCBs and thus have 209 possible congeners. Only a few, however, occur in commercial chemical formulations. They are solids or waxy substances at room temperature. They are virtually insoluble in water and highly resistant to degradation (Secretariat of the Basel Convention; 1997 & 2003).

4.8.2

Occurrence

Wastes consisting of, containing or contaminated with PCBs, PCTs or PBBs are found in a number of physical forms, including:

- Equipment containing or contaminated with PCBs or PCTs (capacitors, circuit breakers, electrical cables, electric motors, electromagnets, heat transfer equipment, hydraulic equipment,
- Solvents contaminated with PCBs or PCTs;
- End-of-life vehicles and shredder light fraction (fluff) containing or contaminated with PCBs;
- Oils consisting of, containing or contaminated with PCBs or PCTs (dielectric fluids, heat transfer fluids, hydraulic fluids, motor oil);
- Plastics containing or contaminated with PBBs and equipment containing such materials;

It should be noted that the categories above mainly apply to PCBs, which were produced in much larger quantities than PBBs or PCTs. PBBs and PCTs are rarely found in large bulk situations and therefore do not have the potential to form large amounts of waste (Bench, D.; 2008).

Table 6 shows the exports of PCB containing waste in the EEA countries for 2007. Transformers and capacitors containing PCBs form the major part.

ELW code	Total amount (ton)	Description
160209	7 999	transformers and capacitors containing PCBs
130301	1 603	insulating or heat transmission oils containing PCBs
170902	823	construction and demolition wastes containing PCB (e.g. PCB-containing sealants, PCB-containing resin-based floorings, PCB-containing sealed glazing units, PCB-containing capacitors)
130101	639	hydraulic oils, containing PCBs
160210	6	discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09
Total	11 070	

Table 6 : Hazardous waste 2007 - exported hazardous wastes, containing PCB's in the EEA countries related to activity in the European Waste List (6-digit level) (ETC/SCP; 2009)

The main problem with exports of PCB-containing equipment/oils, is that the presence of PCB cannot be discerned de visu .

4.8.3

Risks

PCBs include 12 congeners for which the World Health Organization has assigned toxicity equivalency factors because they exhibit dioxin-like toxicity. Congeners of PBBs have not been assigned toxicity equivalency factors by the World Health Organization (Secretariat of the Basel Convention; 1997 & 2003).

Treatment and destruction of PCBs requests specific high temperature incineration processes to avoid the generation of dioxins. In many developing countries, these infrastructure is lacking and waste is dumped or burned, with harmful effects as a consequence (Bench, D.; 2008).

4.9

A4030: Wastes from biocides and phytopharmaceuticals

4.9.1

Material description

- *A4030 Wastes from the production, formulation and use of biocides and phytopharmaceuticals, including waste pesticides and herbicides which are off-specification, out-dated , or unfit for their originally intended use*

'Out-dated' means unused within the period recommended by the manufacturer.

4.9.2

Occurrence

Large stockpiles of obsolete pesticides, consisting of about half a million tonnes of toxic chemicals, exist in the developing world. Most of these stockpiles were not transported as waste but have become obsolescent because a product has been de-registered locally or banned internationally, or more commonly because of long-term storage during which the product or its packaging degrade. However, without doubt some of these pesticide stocks have been and are still being traded illegally across borders. For example in Eastern European and Central Asian countries obsolete pesticides are excavated from disposal sites and repacked in bags and supplied with new labels and brought often to local markets, but also transported over the borders. Illegal transport of such pesticides takes place regularly in south-east Asia, where stores exist of illegal shipments that have been caught at the border⁹ (Secretariat of the Basel Convention; 2009).

4.9.3

Risks

The health consequences are serious. It has been estimated that between 1 and 3% of agricultural workers worldwide suffer from acute pesticide poisoning with at least 1 million requiring hospitalization each year, according to a report prepared jointly for the FAO, UNEP and WHO . These figures equate to between 25 million and 77 million agricultural workers worldwide.

⁹ A number of organisations have taken steps to address obsolescence and the supply of obsolete or inappropriate pesticides. These include international organisations such as the UN bodies and OECD, trade bodies, donors such as the World Bank, and NGOs.

Indirect exposure and environmental impacts are less readily quantified but also serious. Once pesticides enter soil they spread at rates that depend on the type of soil and pesticides, moisture and organic matter content of the soil and other factors (FAO; 2012)

4.10

A4130: Waste packages and containers containing Annex I substances

Packaging material mainly consist of paper/cardboard, plastic, metals, textile, glass. In what follows, the occurrence and risks of hazardous plastic, paper/cardboard packaging material and metal packaging are described.

4.10.1

Material description

4.10.1.1

Plastic packaging

Plastic packaging waste consist mainly of plastic bottles, tubes and bags, but also plastic foil used for packing and plastics used for jerry cans.

Possible contamination consist mainly of:

- Chemicals (coming from pure chemicals, cleaning products, medicines, make-up, paint, glue ...) or other residues on used packaging;
- Mixed plastics (combination of different polymers), hampering high grade recycling;
- Additives, stabilisers, plasticizers.

The export for recovery and disposal of hazardous plastics is forbidden to non-OECD countries.



Umweltbundesamt GmbH, Spittelauer Lander 5, 1090 Vienna, Austria

Figure 14: Baled PET bottles



Umweltbundesamt GmbH, Spittelauer Lnder 5, 1090 Vienna, Austria

Figure 15: Baled plastic foil, mainly LDPE



Umweltbundesamt GmbH, Spittelauer Lnder 5, 1090 Vienna, Austria

Figure 16: Plastic foil waste

4.10.1.2

Cardboard

Low grade (e.g. mixed paper and board) and kraft grade (e.g. paper sacks and corrugated boxes) grey board are suitable for recycling into new packaging.

Waste paper and cardboard may be contaminated by materials that prevent or limit their ability to be recycled in the pulp and paper industry. It can be metal, plastic, glass, textiles, wood, sand and building materials, synthetic materials and synthetic papers. But also hazardous products can be found, but are difficult to be discerned de visu from non-hazardous variants. Export of paper and cardboard waste for disposal is forbidden, except to EU Member States and Iceland, Norway, Switzerland.

4.10.1.3

Metal packaging

Scrap metal packaging come in two forms: ferrous (steel and iron) which includes steel packaging such as containers, and non-ferrous (such as copper, brass, aluminium and zinc) which includes the majority of drinks cans. Especially ferrous scrap can be contaminated with chemicals, remaining as residues from liquid packaging content (solvents, ink, oils, paint, varnish, lacquer, ...)

Export of hazardous metal waste from EU is forbidden to non-OECD countries for recovery and to non EFTA+Basel countries for disposal.



<http://www.amenities-ltd.co.uk/recycling/metal-recycling/>

Figure 17 : Aluminum packaging waste scrap

4.10.2

Occurrence

The market for plastic and cardboard waste in non-OECD countries is increasing at high speed, due to a rather volatile market and high profits. Plastic waste is known for its large set of exemptions and specific procedures depending on the country of destination. This makes a correct administrative follow-up rather complicated. The distinction between (heavily) polluted plastic waste and mixed waste containing plastics is often difficult to make. Plastic waste exported for recycling must be free of forbidden hazardous components, such as brominated flame retardants¹⁰. This is very difficult to judge in the field (Arcadis & Bio Intelligence Service; 2010).

4.10.3

Risks

Environmental and health risks may result from the disposal of hazardous packaging waste in countries which do not have the capacity to manage these wastes in a controlled manner. The waste can be subject to recycling in facilities with low environmental standards or (part of) the waste can be landfilled without appropriate protection measures (resulting in water and soil contamination). Environmental and health risks could also result from human exposure to potentially toxic residual substances present in the waste.

4.11

B1250: Waste end-of-life motor vehicles

4.11.1

Material description

- *B1250: Waste end-of-life motor vehicles, containing neither liquids nor other hazardous components*

End of Life motor vehicles (ELV) can be described as cars that hold up to a maximum of eight passengers in addition to the driver, and trucks and lorries that are used to carry goods up to a maximum mass of 3.5 tonnes (commercial vehicles) (According to the European legislation on end-of-life vehicles)

Complete vehicles may, if not properly managed in a waste stage, cause significant environmental pollution as they may be contaminated with following parts and hazardous substances:

- Fluids: brake fluids, antifreeze fluids, (engine) oils and oil filters;

¹⁰ Some brominated flame retardants are identified as persistent organic pollutants for which the Stockholm Convention and the POP-Regulation (EC No 850/2004) forbids recycling.

- lead, mercury, cadmium and hexavalent chromium (for example lead in accumulators, PVC or solder, mercury in LCD screens, cadmium in accumulators for electrical vehicles, chromium in corrosion preventive coatings, ...);
- brake pads containing asbestos;
- spent catalysts;
- batteries and accumulators.

End-of-life vehicles contain numerous hazardous substances and therefore need to be treated as hazardous waste, as long as these substances are present. About 25% of a car's weight is classified as hazardous waste when discarded.

4.11.2

Occurrence

ELV are a frequently occurring waste stream, in a depolluted or non-depolluted form. Provisions for transboundary movements of end-of-life vehicles (waste) differ according to the state (of dismantling) of the waste vehicle:

- Complete vehicle;
- "Depolluted" vehicle: vehicle drained of liquids and free of other hazardous components;

"Depolluted" vehicles must be free of contaminants.

The export of used vehicles reported by EU-27 Member States for 2009 amounts to 3.740.299 tonnes (see also Annex 1 Quantitative data). Reporting on recycling and known figures on exports of ELV only covers partly for the estimated number of ELV which suggests that ELVs are often improperly shipped as second-hand cars from industrialised to developing countries. Regarding the EU situation, shipments to countries outside the EU have been increasing since 1997. Shipments to Africa are relatively stable, whereas shipments to the EECCA countries (Eastern Europe, Caucasus and Central Asia) and South Eastern European countries have increased. Higher profits from selling these used cars intact rather than as spare parts and materials in the European Union can explain this phenomenon.

One major challenge for the waste stream end-of-life vehicles is the distinction between real ELV (waste) and second-hand cars (products). Used cars must satisfy a number of requirements in order to be possibly classified as second-hand cars. It is argued that used cars and used parts of vehicles should be considered waste when they are in a state which obviously does not permit its re-commercialisation or reuse without major repair. Examples given are:

- Vehicles with heavily damaged car body;
- Motor blocs with detached or removed cables;
- Vehicles with tyres with poor or no profile;

Visual material below can deliver additional proof on the thin border line between second-hand and ELV.

The export from EU for recovery of non-depolluted and thus hazardous ELV is forbidden to non-OECD countries. Export of non-hazardous and hazardous ELV from EU for disposal is forbidden except to EU Member States and Iceland, Norway and Switzerland.



Figure 18: End-of-life, not fit for driving, loaded with WEEE



Figure 19: End-of-life vehicle bunched with hazardous 'spare parts'



Figure 20: End-of-life vehicle bunched with hazardous 'spare parts' and other goods (pharmaceuticals)



Umweltbundesamt GmbH, Spittelauer Lander 5, 1090 Vienna, Austria

Figure 21 : End-of-life not drained from liquids

4.11.3

Risks

As far as concerns recycling of ELV, the dismantling process often focuses on the parts with an economic value, suitable for reuse, recycling, or sale. The ELV dismantling could be done improperly, increasing the amount and toxicity of ELV waste further processed by shredding companies.

Final treatment in non-industrialised countries can be less controlled, with (parts of) ELV ending up at landfills or incinerated with potential harmful effects for the environment. Some end-of-life vehicles are still abandoned or 'garaged' rather than scrapped.

Second-hand cars, or ELV shipped as such, often carry a load of WEEE, lead accumulator waste, and different other waste types. See Figure 18, Figure 19 & Figure 20. Depolluted ELV destined for shredding can be filled with metal scrap and other waste fit for shredding. A chance of pollution by hazardous waste does occur.

4.12

B3140: Waste pneumatic tyres

4.12.1

Material description

- *B3140 Waste pneumatic tyres, excluding those destined for Annex IVA operations (=disposal operations)*

Waste tyres can take the shape of used, unwanted or rejected tyres. They have the same chemical properties than tyres except that by the time a tyre has reached end-of-life, it has generally lost $\pm 20\%$ of its weight from the tread. Tyres are made of 48% rubber which can be either natural or synthetic. The other components mainly used in the manufacture of tyres are carbon black, metal and to a lesser extent textile, zinc oxide, sulphur and additives.

Tyres contain several hazardous substances which may persist in the environment as for instance polycyclic aromatic hydrocarbons (PAHs), phthalates, zinc (above a certain concentration), lead or phenols.

4.12.2

Occurrence

Tyres are a frequently shipped waste stream posing problems due to the difficulty to distinguish between waste and second-hand goods. The export of used tyres reported by EU-27 Member States for 2009 amounts to 215.475 tonnes (see Annex 1 Quantitative

data). The following table provides an overview of management options of end-of-life tyres and shows the total proportion of end-of-life tyres exported in the EU. As can be seen, total amount of export decreased in 2010 to 186.000 tonnes in 2010 (5,7% of total used tyres).

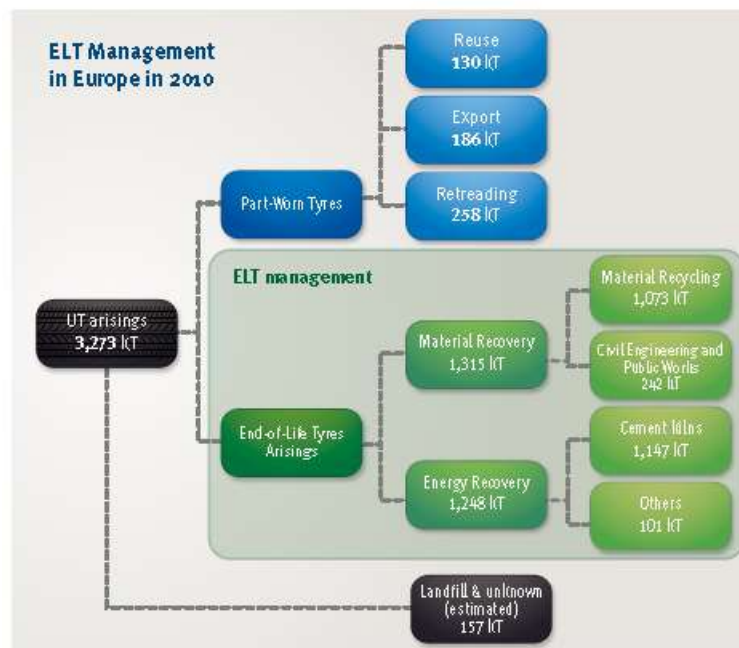


Figure 22 : End of life options for rubber tyres in the EU in 2010 (ETRMA ; 2012)

The most common destination for waste tyres are African countries, India, Russia and Asia. Export of tyres and rubber scrap from EU for disposal is forbidden, except to EU Member States and Iceland, Norway, and Switzerland. Cases of illegal transfrontier shipments of tyres are frequently made public. An example is the export of waste tyres from a UK company to Vietnam in 2009, although Regulation (EC) No 1013/2006 does not allow the export of hazardous waste to non-OECD countries and countries such as Vietnam classify waste tyres as hazardous¹¹.

An important issue consists of low quality tyres that are exported as second-hand goods. Although they cannot be reused any more, they are not safe to use any more or they do not have a long life expectancy any more.



Umweltbundesamt GmbH, Spittelauer Lnder 5, 1090 Vienna, Austria

¹¹ <http://www.mrw.co.uk/ea-fines-waste-tyre-exporter/3005931.article>

Figure 23: Waste tyres



Figure 24: Non-compliant tyres ready for export as second-hand

4.12.3

Risks

Illegal exports of tyres for disposal to non-OECD countries or legal exports of tyres for recycling diverted from their initial stated purpose, in breach with the export ban, can result in environmental damages and safety risks. Open-air burning can release potentially hazardous levels of carbon monoxide and mono- and polyaromatic hydrocarbons (PAHs). Additionally, after open-air burning, organic compounds like pyrolytic oils rest in the soil and can cause environmental damages. Illegal storage implies a high risk of combustion and the fact that tyres can constitute breeding grounds for mosquitoes, rodents and other pests (Secretariat of the Basel Convention; 2011).

Amendment proposals

For each waste code mentioned by the UK and Peru, this chapter proposes suggestions for amendments on either:

- The HS codes itself : proposing to add new codes, omitting codes, changing the wording of codes
- The section and chapter notes and subheading notes, as included in the HS itself
- The HS explanatory notes

Where needed following principles have been taken into account:

- The changes need to lead to a better linking between waste codes and HS codes, with in the ideal conditions a one-to-one relation to some major codes.
- If a waste code is covered by a larger HS code that includes both wastes and non-wastes, or that is designed to cover in first instance non-wastes, then waste could be excluded from the definition of the HS code, and a new HS code describing the product in its waste phase (eventually at a higher level) could be introduced.
- In order to achieve a one-to-one relation, if multiple waste codes are all covered by the same non catch-all HS code, the HS code could be split up into one entry for each waste code.
- If a less detailed waste code covers a large number of more detailed HS codes a HS code covering only the waste phases at a higher level could be introduced.

Notes could be introduced to explicitly exclude or include wastes in specific chapters or sections, to generate clarity on the possibility to link waste codes with specific chapters and sections.

New entries, additions, new notes and explanatory notes are printed in *Italic*.

Changes in wordings of entries, notes or explanatory notes are printed in **bold**.

5.1

B1110 and A1180: Electrical and electronic assemblies

General notes

SECTION XVI – MACHINERY AND MECHANICAL APPLIANCES; ELECTRICAL EQUIPMENT; PARTS THEREOF; SOUND RECORDERS AND REPRODUCERS, TELEVISION IMAGE AND SOUND RECORDERS AND REPRODUCERS, AND PARTS AND ACCESSORIES OF SUCH ARTICLES

Note / Heading	Amendment proposal
Note 1. “This section does not cover.”	<p>Add following texts:</p> <p><i>(x) Spent fuel elements (cartridges) of nuclear reactors and other radioactive residues (heading 28.44);</i></p> <p><i>(x) Waste and scrap of Section VII (according to its constituent material, for example, headings 39.15, 40.04 or 40.17);</i></p> <p><i>(x) Waste and scrap of electronic circuit boards and similar carriers containing precious metals (heading 71.12);</i></p> <p><i>(x) Metal waste and scrap which fulfils the requirements of Note 8(a) to Section XV;</i></p>
Note 2. “Subject to note 1	<p>Replace initial paragraph by the following text:</p> <p>Subject to Note 1 to this Section, Note 1 to Chapter 84 and Note 1 to Chapter 85, parts of machines (not being parts of the articles of heading 84.84, 84.88, 85.44, 85.45, 85.46, 85.47 and 85.49) are to be classified according to the following rules:</p>
New Note	<p>Add new Note:</p> <p><i>For the purposes of this Section, the expression "end-of-life machines, parts and accessories and waste and scrap of machines, parts and accessories" means machines, parts and accessories and waste and scrap of machines, parts and accessories which are in such a degraded or worn-out condition as to render them unusable or which cannot be used properly and safely because of breakage, cutting-up, wear or other reasons.</i></p>
New Note	<p>Add new Note:</p> <p><i>End-of-life [electrical or electronic] machines, equipment or apparatus, parts and accessories [containing electrical or electronic components] of any Chapter and other [electrical or electronic] waste and scrap of machines, equipment or apparatus, parts and accessories [containing electrical or electronic components] of any Chapter are classified in heading 85.49.</i></p>
New Note	<p>Add new Note:</p> <p><i>Electrical and electronic equipment means equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields and designed for use with a voltage rating not exceeding 1 000 volts for alternating current and 1 500 volts for direct current.</i></p>

<p>Explanatory notes: new Section Note</p>	<p>Add new Section Note in the HSEN (page XVI-8):</p> <p><i>The Section covers "end-of-life machines, parts and accessories and waste and scrap of machines, parts and accessories" which are in such a degraded or worn-out condition that it would be very difficult to repair or rebuild them, or which in their existing condition cannot be used properly and safely (in accordance with the standards and/or legislation in force) to perform the functions for which they were originally designed due to breakage, cutting-up, wear or other reasons (for example, presence of certain hazardous components). They are intended for scrapping, destruction, recycling or preparation for reuse.</i></p> <p><i>For the purpose of this range of goods the expression "waste and scrap of machines, parts and accessories" means any substance or object which the holder discards or intends or is required to discard which belongs to one or more of the following categories:</i></p> <ul style="list-style-type: none"> <i>– products which are off-specification [in both their country of origin and their country of destination];</i> <i>– products which are obsolete [in both their country of origin and their country of destination];</i> <i>– materials [parts] which are contaminated or soiled as the result of deliberate or accidental actions;</i> <i>– unusable parts (e.g. end-of-life batteries, equipment containing exhausted catalysts, etc.);</i> <i>– any equipment the use of which is prohibited by law [both in its country of origin and its country of destination];</i> <i>– [production or consumption residues not otherwise specified above;]</i> <i>– Any equipment or parts which is discarded because no further use is intended;</i> <i>– any equipment the characteristics of which are a combination of some of the above categories.</i> <p><i>Products intended for re-use (without checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing) as second-hand goods, used replacement parts or reconstructable parts are excluded. However, products containing only some parts that can be re-used directly are to be regarded as a whole and classified as end-of-life products.</i></p> <p><i>[If such material or equipment is found to emit radiation in accordance with the definition of radioactivity given in the Explanatory Note to heading 28.44, it is to be classified in heading 28.44.]</i></p>
--	--

WEEE

Chapter 84 – Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof

Note / Heading	Amendment proposal
Note 1. “This section does not cover:”	Add following texts: <i>Products of heading 85.49;</i>
New heading	Add following code / heading: 84.88 – End-of-life machines, parts and accessories of this Section and waste and scrap of machines, parts and accessories of this Section, other than of heading 85.49.
Explanatory notes: new Heading / page	Add new heading 84.88 in the HSEN (new page XVI-8488-1): 84.88 – End-of-life machines, parts and accessories of this Section and waste and scrap of machines, parts and accessories of this Section, other than of heading 85.49. <i>The General Explanatory Note, Group (x) applies, mutatis mutandis, to this heading. However, products of heading 85.49 are excluded.</i> <i>This heading includes:</i> <i>(1) End-of-life machines, parts and accessories of this Section for scrapping, destruction or recycling;</i> <i>(2) Waste and scrap obtained from end-of-life machines, parts and accessories of this Section.</i> <i>[(3) End-of-life machines, parts and accessories of this Section and waste and scrap of machines, parts and accessories of this Section, other than of products classified under heading 85.49, , presenting a hazardous profile because of pollution or contamination by chemical or bacteriological products and not elsewhere specified or included;]</i>

Chapter 85 – Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles

Note / Heading	Amendment proposal
Note 1. “This section does not cover:”	Add following texts: <i>Products of heading 84.88;</i>
Heading 85.48	Replace Heading 85.48 by the following text: 85.48 – Electrical parts of machinery or apparatus, not specified or

	<p>included elsewhere in this Chapter.</p> <p>Current subheadings are deleted.</p>
New heading	<p>Add the following new heading and subheading:</p> <p>85.49 – End-of-life electrical or electronic machines, equipment or apparatus, parts and accessories of any Chapter and other electrical and electronic waste and scrap of machines, equipment or apparatus, parts and accessories of any Chapter [not elsewhere specified or included].</p> <p>85.4820 – Waste and scrap of primary cells and primary batteries, electric accumulators other than lead-acid accumulators; spent primary cells, spent primary batteries, spent electric accumulators other than lead-acid accumulators</p> <p>85.4830 – Waste and scrap of lead-acid electric accumulators; spent lead-acid electric accumulators</p> <p>8548.90 – Other</p>
Explanatory notes – Heading 85.48	<p>Replace Heading 85.48 by the following text:</p> <p>85.48 – Electrical parts of machinery or apparatus, not specified or included elsewhere in this Chapter.</p> <p>Current subheadings are deleted.</p> <p>Group (A) is deleted</p> <p>Headline text of group (B) is deleted</p>
Explanatory notes: new Heading / page	<p>Add new heading 85.49 and subheadings in the HSEN (new page XVI-8549-1):</p> <p>85.49 – End-of-life electrical or electronic machines, equipment or apparatus, parts and accessories of any Chapter and other electrical and electronic waste and scrap of machines, equipment or apparatus, parts and accessories of any Chapter [not elsewhere specified or included].</p> <p>85.4820 – Waste and scrap of primary cells and primary batteries, electric accumulators other than lead-acid accumulators; spent primary cells, spent primary batteries, spent electric accumulators other than lead-acid accumulators</p> <p>85.4830 – Waste and scrap of lead-acid electric accumulators; spent lead-acid electric accumulators</p> <p>8548.90 – Other</p> <p>(A) END-OF-LIFE ELECTRICAL OR ELECTRONIC MACHINES, EQUIPMENT OR APPARATUS, PARTS AND ACCESSORIES OF ANY CHAPTER AND OTHER ELECTRICAL AND ELECTRONIC WASTE AND SCRAP OF MACHINES, EQUIPMENT OR APPARATUS, PARTS AND ACCESSORIES OF ANY CHAPTER [NOT ELSEWHERE SPECIFIED OR INCLUDED].</p> <p><i>The General Explanatory Note to this Section, Group (x), and the Explanatory Note to heading 84.88 apply, mutatis mutandis, to this heading.</i></p>

	<p>However, products of heading 84.88 are excluded.</p> <p>This heading includes:</p> <p>(1) End-of-life electrical or electronic machines, equipment or apparatus, parts and accessories of any Chapter for scrapping, destruction or recycling or preparation for reuse. Preparation for reuse means checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing;</p> <p>(2) Electrical or electronic waste and scrap of electrical or electronic machines, equipment or apparatus, parts and accessories of any Chapter.</p> <p>(3) End-of-life electrical or electronic machines, equipment or apparatus, parts and accessories of any Chapter and other electrical and electronic waste and scrap of machines, equipment or apparatus, parts and accessories of any Chapter [not elsewhere specified or included, presenting a hazardous profile because of pollution or contamination by chemical or bacteriological products and not elsewhere specified or included;</p> <p>Waste and scrap of electronic circuit boards and analogue media containing precious metals fall under heading 71.12.</p> <p>(B) WASTE AND SCRAP OF PRIMARY CELLS, PRIMARY BATTERIES AND ELECTRIC ACCUMULATORS; SPENT PRIMARY CELLS, SPENT PRIMARY BATTERIES AND SPENT ELECTRIC ACCUMULATORS</p> <p>Insert the complete text of former group (A) of heading 85.48</p>
--	---

Chapter 90 – Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof

Note / Heading	Amendment proposal
Note 1. “This section does not cover.”	<p>Add following texts:</p> <p>(x) Radioactive residues (heading 28.44);</p> <p>(x) Waste and scrap of Section VII (according to its constituent material, for example, headings 39.15, 40.04 or 40.17);</p> <p>(x) Waste and scrap of heading 71.12;</p> <p>(x) Metal waste and scrap which fulfils the requirements of Note 8(a) to Section XV;</p> <p>(x) Products of heading 85.49;</p>
Note 2. “Subject to note 1 above...”	<p>Replace initial paragraph by the following text:</p> <p>Subject to Note 1 above, parts and accessories for machines, apparatus, instruments or articles of this Chapter (not being parts or accessories of the articles of heading 90.34) are to be classified</p>

	according to the following rules:
New Note	<p>Add new Note:</p> <p><i>For the purposes of this Chapter, the expression "end-of-life instruments or apparatus, parts and accessories of this Chapter and waste and scrap of instruments or apparatus, parts and accessories of this Chapter " means instruments or apparatus, parts and accessories and waste and scrap of instruments or apparatus, parts and accessories, which are in such a degraded or worn-out condition as to render them unusable or which cannot be used properly and safely because of breakage, cutting-up, wear or other reasons.</i></p>
New Heading	<p>Add new Heading:</p> <p>90.34 – End-of-life instruments or apparatus, parts and accessories of this Chapter and other waste and scrap of instruments or apparatus, parts and accessories of this Chapter.</p>
Explanatory notes: new Section Note	<p>Add new Section Note in the HSEN (page XVIII-90-6):</p> <p>(X) END-OF-LIFE INSTRUMENTS OR APPARATUS, PARTS AND ACCESSORIES OF THIS CHAPTER AND OTHER WASTE AND SCRAP OF INSTRUMENTS OR APPARATUS, PARTS AND ACCESSORIES OF THIS CHAPTER</p> <p><i>(Section Note (x))</i></p> <p><i>The General Explanatory Note to Section XVI, Group (x), applies, mutatis mutandis, to this Chapter.</i></p>
Explanatory notes: new Heading / page	<p>Add new heading 90.34 in the HSEN (new page XVI-9034-1):</p> <p>90.34 – End-of-life instruments or apparatus, parts and accessories of this Chapter and other waste and scrap of instruments or apparatus, parts and accessories of this Chapter.</p> <p><i>The General Explanatory Note to this Chapter, Group (x), and the Explanatory Note to heading 84.88 apply, mutatis mutandis, to this heading. However, products of heading 85.49 are excluded.</i></p>

Chapter 91 – Clocks and watches and parts thereof

Note / Heading	Amendment proposal
Note 1. "This section does not cover:"	<p>Add following texts:</p> <p><i>[(x) Radioactive residues (heading 28.44);]</i></p> <p><i>(x) Waste and scrap of Section VII (according to its constituent material, for example, headings 39.15, 40.04 or 40.17);</i></p> <p><i>(x) Waste and scrap of electronic circuit boards and similar carriers</i></p>

	<p>containing precious metals (heading 71.12);</p> <p>(x) Metal waste and scrap which fulfils the requirements of Note 8(a) to Section XV;</p> <p>(x) Products of heading 85.49;</p>
New Note	<p>Add new Note:</p> <p><i>For the purposes of this Chapter, the expression "end-of-life clocks and watches, parts and accessories of this Chapter and waste and scrap of clocks and watches, parts and accessories of this Chapter" means clocks and watches, parts and accessories and waste and scrap of clocks and watches, parts and accessories, which are in such a degraded or worn-out condition as to render them unusable or which cannot be used properly and safely because of breakage, cutting-up, wear or other reasons.</i></p>
New Heading	<p>Add new Heading:</p> <p>91.15 – End-of-life clocks and watches, parts and accessories of this Chapter and waste and scrap of clocks and watches, parts and accessories of this Chapter.</p>
Explanatory notes: new Section Note	<p>Add the following text at the end of the General Explanatory Note in the HSEN (page XVIII-91-1):</p> <p><i>The General Explanatory Note to Section XVI, Group (x), applies, mutatis mutandis, to this Chapter.</i></p>
Explanatory notes: new Heading / page	<p>Add new heading 91.15 in the HSEN (new page XVI-9115-1):</p> <p>91.15 – End-of-life clocks and watches, parts and accessories of this Chapter and waste and scrap of clocks and watches, parts and accessories of this Chapter.</p> <p><i>The General Explanatory Note, to this Chapter, and the Explanatory Note to heading 84.88 apply, mutatis mutandis, to this heading. However, products of heading 85.49 are excluded.</i></p>

Chapter 92 – Musical instruments; parts and accessories of such articles

Note / Heading	Amendment proposal
Note 1. "This section does not cover:"	<p>Add following texts:</p> <p><i>[(x) Radioactive residues (heading 28.44);]</i></p> <p><i>(x) Waste and scrap of Section VII (according to its constituent material, for example, headings 39.15, 40.04 or 40.17);</i></p> <p><i>(x) Waste and scrap of electronic circuit boards and similar carriers containing precious metals (heading 71.12);</i></p> <p><i>(x) Metal waste and scrap which fulfils the requirements of Note 8(a) to Section XV;</i></p>

	(x) <i>Products of heading 85.49;</i>
New Note	<p>Add new Note:</p> <p><i>For the purposes of this Chapter, the expression "end-of-life musical instruments, parts and accessories of this Chapter and waste and scrap of musical instruments, parts and accessories of this Chapter" means musical instruments, parts and accessories and waste and scrap of musical instruments, parts and accessories which are in such a degraded or worn-out condition as to render them unusable or which cannot be used properly and safely because of breakage, cutting-up, wear or other reasons.</i></p>
New Heading	<p>Add new Heading:</p> <p>92.10 – End-of-life musical instruments, parts and accessories of this Chapter and waste and scrap of musical instruments, parts and accessories of this Chapter.</p>
Explanatory notes: new Section Note	<p>Add the following text at the end of the General Explanatory Note in the HSEN (page XVIII-92-1):</p> <p><i>The General Explanatory Note to Section XVI, Group (x), applies, mutatis mutandis, to this Chapter.</i></p>
Explanatory notes: new Heading / page	<p>Add new heading 92.10 in the HSEN (new page XVI-9210-1):</p> <p>92.10 – End-of-life musical instruments, parts and accessories of this Chapter and waste and scrap of musical instruments, parts and accessories of this Chapter.</p> <p><i>The General Explanatory Note to this Chapter and the Explanatory Note to heading 84.88 apply, mutatis mutandis, to this heading. However, products of heading 85.49 are excluded.</i></p>

Chapter 93 – Arms and ammunition; parts and accessories thereof

Note / Heading	Amendment proposal
Note 1. "This section does not cover:"	<p>Add following texts:</p> <p>(x) <i>Radioactive residues (heading 28.44);</i></p> <p>(x) <i>Waste and scrap of chemical and biological materials (38.25, Section VI);</i></p> <p>(x) <i>Waste and scrap of Section VII (according to its constituent material, for example, headings 39.15, 40.04 or 40.17);</i></p> <p>(x) <i>Waste and scrap of electronic circuit boards and similar carriers containing precious metals (heading 71.12);</i></p> <p>(x) <i>Metal waste and scrap which fulfils the requirements of Note 8(a) to Section XV;</i></p> <p>(x) <i>Products of heading 85.49;</i></p>
New Note	Add new Note:

	<i>For the purposes of this Chapter, the expression "end-of-life arms and ammunition, parts and accessories of this Chapter and waste and scrap of arms and ammunition, parts and accessories of this Chapter" means arms and ammunition, parts and accessories and waste and scrap of arms and ammunition, parts and accessories which are in such a degraded or worn-out condition as to render them unusable or which cannot be used properly and safely because of breakage, cutting-up, wear or other reasons.</i>
New Heading	Add new Heading: 93.08 – End-of-life arms and ammunitions, parts and accessories of this Chapter and waste and scrap of arms and ammunitions, parts and accessories of this Chapter.
Explanatory notes: new Section Note	Add the following text at the end of the General Explanatory Note in the HSEN (page XIX-93-1): <i>The General Explanatory Note to Section XVI, Group (x), applies, mutatis mutandis, to this Chapter.</i>
Explanatory notes: new Heading / page	Add new heading 93.08 in the HSEN (new page XIX-9308-1): 93.08 – End-of-life arms and ammunitions, parts and accessories of this Chapter and waste and scrap of arms and ammunitions, parts and accessories of this Chapter. <i>The General Explanatory Note to this Chapter and the Explanatory Note to heading 84.88 apply, mutatis mutandis, to this heading. However, products of heading 85.49 are excluded.</i>

Chapter 94 – Furniture; bedding mattresses, mattress supports, cushions and similar stuffed furnishings; lamps and lighting fittings, not elsewhere specified or included; illuminated signs, illuminated name-plates and the like; prefabricated buildings

Note / Heading	Amendment proposal
Note 1. "This section does not cover:"	Add following texts: [(x) <i>Radioactive residues (heading 28.44);</i> (x) <i>Waste and scrap of Section VII (according to its constituent material, for example, headings 39.15, 40.04 or 40.17);</i> (x) <i>Waste and scrap of electronic circuit boards and similar carriers containing precious metals (heading 71.12);</i> (x) <i>Metal waste and scrap which fulfils the requirements of Note 8(a) to Section XV;</i> (x) <i>Products of heading 85.49;</i>
New Note	Add new Note: <i>For the purposes of this Chapter, the expression "end-of-life articles and</i>

	<i>parts thereof of this Chapter and waste and scrap of articles and parts thereof of this Chapter " means articles and parts thereof of this Chapter and waste and scrap of articles and parts thereof of this Chapter, which are in such a degraded or worn-out condition as to render them unusable or which cannot be used properly and safely because of breakage, cutting-up, wear or other reasons.</i>
New Heading	Add new Heading: 94.07 – End-of-life articles and parts thereof of this Chapter and waste and scrap of articles and parts thereof of this Chapter.
Explanatory notes: new Section Note	Add the following text at the end of the General Explanatory Note in the HSEN (page XX-94-3): <i>The General Explanatory Note to Section XVI, Group (x), applies, mutatis mutandis, to this Chapter.</i>
Explanatory notes: new Heading / page	Add new heading 94.07 in the HSEN (new page XX-9407-1): 94.07 – End-of-life articles and parts thereof of this Chapter and waste and scrap of articles and parts thereof of this Chapter. <i>The General Explanatory Note to this Chapter and the Explanatory Note to heading 84.88 apply, mutatis mutandis, to this heading. However, products of heading 85.49 are excluded.</i>

Chapter 95 – Toys, games and sports requisites; parts and accessories thereof

Note / Heading	Amendment proposal
Note 1. "This section does not cover:"	Add following texts: [(x) Radioactive residues (heading 28.44);] (x) Waste and scrap of Section VII (according to its constituent material, for example, headings 39.15, 40.04 or 40.17); (x) Waste and scrap of electronic circuit boards and similar carriers containing precious metals (heading 71.12); (x) Metal waste and scrap which fulfils the requirements of Note 8(a) to Section XV; (x) Products of heading 85.49;
New Note	Add new Note: <i>For the purposes of this Chapter, the expression "end-of-life articles, parts and accessories of this Chapter and waste and scrap of articles, parts and accessories of this Chapter " means articles, parts and accessories of this Chapter and waste and scrap of articles, parts and accessories of this Chapter, which are in such a degraded or worn-out condition as to render them unusable or which cannot be used properly and safely because of breakage, cutting-up, wear or other reasons.</i>

New Heading	Add new Heading: 95.09 – End-of-life articles, parts and accessories of this Chapter and waste and scrap of articles, parts and accessories of this Chapter.
Explanatory notes: new Section Note	Add the following text at the end of the General Explanatory Note in the HSEN (page XX-95-2): <i>The General Explanatory Note to Section XVI, Group (x), applies, mutatis mutandis, to this Chapter.</i>
Explanatory notes: new Heading / page	Add new heading 95.09 in the HSEN (new page XX-9509-1): 95.09 – End-of-life articles, parts and accessories of this Chapter and waste and scrap of articles, parts and accessories of this Chapter. <i>The General Explanatory Note to this Chapter and the Explanatory Note to heading 84.88 apply, mutatis mutandis, to this heading. However, products of heading 85.49 are excluded.</i>

5.2

B1250: Waste end-of-life motor vehicles

SECTION XVI - MACHINERY AND MECHANICAL APPLIANCES; ELECTRICAL EQUIPMENT; PARTS THEREOF; SOUND RECORDERS AND REPRODUCERS, TELEVISION IMAGE AND SOUND RECORDERS AND REPRODUCERS, AND PARTS AND ACCESSORIES OF SUCH ARTICLES

Chapter 84 – Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof

Note / Heading	Amendment proposal
Note 1. “This section does not cover:”	Add following texts: <i>Products of heading 85.49;</i>
New heading	Add following code / heading: 84.88 – End-of-life machines, parts and accessories of this Section and waste and scrap of machines, parts and accessories of this Section, other than of heading 85.49.
Explanatory notes: new Heading / page	Add new heading 84.88 in the HSEN (new page XVI-8488-1): 84.88 – End-of-life machines, parts and accessories of this Section and waste and scrap of machines, parts and accessories of this Section, other than of heading 85.49. <i>The General Explanatory Note, Group (x) applies, mutatis mutandis, to this</i>

	<p>heading. However, products of heading 85.49 are excluded.</p> <p><i>This heading includes:</i></p> <p>(1) <i>End-of-life machines, parts and accessories of this Section for scrapping, destruction, or recycling;</i></p> <p>(2) <i>Waste and scrap obtained from end-of-life machines, parts and accessories of this Section.</i></p> <p><i>[(3) End-of-life machines, parts and accessories of this Section and waste and scrap of machines, parts and accessories of this Section, other than of products classified under heading 85.49, , presenting a hazardous profile because of pollution or contamination by chemical or bacteriological products and not elsewhere specified or included;]</i></p>
--	---

Section XVII – VEHICLES, AIRCRAFT, VESSELS AND ASSOCIATED TRANSPORT EQUIPMENT

Note / Heading	Amendment proposal
Note 1. “This section does not cover.”	<p>Add following texts:</p> <p><i>((x) Articles of heading 95.03 or 95.08, or bobsleighs, toboggans or the like of heading 95.06;</i></p> <p><i>[(x) Radioactive residues (heading 28.44);]</i></p> <p><i>(x) Waste and scrap of Section VII (according to its constituent material, for example, headings 39.15, 40.04 or 40.17);</i></p> <p><i>(x) Metal waste and scrap which fulfils the requirements of Note 8(a) to Section XV;</i></p> <p><i>(x) Products of heading 85.49;</i></p>
Note 2 “The expressions ‘parts’ and ‘parts and accessories’ do not apply to”	<p>Add the following text:</p> <p><i>(x) waste tyres of heading 40.04</i></p>
Note 2.(f) electrical machinery or equipment (Chapter 85)	<p>Replace Note 2 (f) by the following text:</p> <p>(f) Electrical machinery or equipment including products of heading 85.49 (Chapter 85);</p>
New Note	Add new Note:

	<p><i>For the purposes of this Section, the expression "end-of-life vehicles, including aircraft, spacecraft, [ships, boats] [vessels] and other transport equipment, parts and accessories and waste and scrap of vehicles, including aircraft, spacecraft, [ships, boats] [vessels] and other transport equipment, parts and accessories" means vehicles, including aircraft, spacecraft, [ships, boats] [vessels] and other transport equipment, parts and accessories and waste and scrap of vehicles, including aircraft, spacecraft, [ships, boats] [vessels] and other transport equipment, parts and accessories which are in such a degraded or worn-out condition as to render them unusable or which cannot be used properly and safely because of breakage, cutting-up, wear or other reasons.</i></p>
Explanatory notes: new Section Note	<p>Add new Section Note in the HSEN (page XVII-2):</p> <p>(x) END-OF-LIFE VEHICLES, INCLUDING AIRCRAFT, SPACECRAFT, [SHIPS, BOATS] [VESSELS] AND OTHER TRANSPORT EQUIPMENT, PARTS AND ACCESSORIES AND WASTE AND SCRAP OF VEHICLES, INCLUDING AIRCRAFT, SPACECRAFT, [SHIPS, BOATS] [VESSELS] AND OTHER TRANSPORT EQUIPMENT, PARTS AND ACCESSORIES</p> <p><i>(Section Note (x))</i></p> <p><i>The General Explanatory Note to Section XVI, Group (x), applies, mutatis mutandis, to this Section.</i></p>

Chapter 86 – Railway or tramway locomotives, rolling stock and parts thereof; railway or tramway track fixtures and fittings and parts thereof; mechanical (including electro mechanical) traffic signalling equipment of all kinds

Note / Heading	Amendment proposal
New Heading	<p>Add new Heading:</p> <p>86.10 – End-of-life vehicles and other transport equipment, parts and accessories of this Chapter and waste and scrap of vehicles and other transport equipment, parts and accessories of this Chapter.</p>
Explanatory notes: new Heading / page	<p>Add new heading 86.10 in the HSEN (new page XVI-8610-1):</p> <p>86.10 – End-of-life vehicles and other transport equipment, parts and accessories of this Chapter and waste and scrap of vehicles and other transport equipment, parts and accessories of this Chapter.</p> <p><i>The General Explanatory Note to this Section, Group (x), and the Explanatory Note to heading 84.88 apply, mutatis mutandis, to this heading. However, products of heading 85.49 are excluded.</i></p>

Chapter 87 – Vehicles other than railway or tramway rolling-stock, and parts and accessories thereof

Note / Heading	Amendment proposal
New Heading	<p>Add new Heading:</p> <p>87.17 - End-of-life vehicles and other transport equipment, parts and accessories of this Chapter and waste and scrap of vehicles and other transport equipment, parts and accessories of this Chapter.</p>
Explanatory notes: new Heading / page	<p>Add new heading 87.17 in the HSEN (new page XVI-8717-1):</p> <p>87.17 – End-of-life vehicles and other transport equipment, parts and accessories of this Chapter and waste and scrap of vehicles and other transport equipment, parts and accessories of this Chapter.</p> <p><i>The General Explanatory Note to this Section, Group (x), and the Explanatory Note to heading 84.88 apply, mutatis mutandis, to this heading. However, products of heading 85.49 are excluded.</i></p> <p><i>An end-of-life vehicle applies at least to one of the following criteria:</i></p> <ul style="list-style-type: none"> ○ <i>The existence of a certificate of destruction;</i> ○ <i>The vehicle stems from a waste collection or waste treatment system;</i> ○ <i>The vehicle is destined for dismantling and reuse of spare parts or for shredding/scraping;</i> ○ <i>The vehicle has among its constituent parts, other than personal effects, anything that is required to be discarded, or is prohibited to be exported under applicable legislation</i> ○ <i>The vehicle is a write-off /is not suitable for minor repair /has badly damaged essential parts (e.g. as a result of an accident) or is cut into pieces (e.g. two halves);</i> ○ <i>No pieces of evidence can be delivered upon request relating to the sale and/or transfer of ownership of the vehicle with a guarantee stating :</i> <ul style="list-style-type: none"> ○ <i>that the vehicle is fully functional and roadworthy, evidence of evaluation/testing in the form of copy of the records as to proof of roadworthiness, conducted shortly before the shipment takes place and performed by an authorised inspector under the national technical roadworthiness test regime, or alternatively upon the relevant competent authorities' decision, a motor assessor, vehicle mechanic or any other type of authorised inspector, or</i> ○ <i>that a vehicle is repairable, proven by a certificate from the competent authorities or based on the evidence referred to in the first bullet point, and</i>

	<ul style="list-style-type: none"> ○ <i>that the vehicle is not waste, based on a declaration by the holder who arranges the transboundary shipment;</i> <p><i>Indications for a classification as end-of-life vehicle are as well:</i></p> <ul style="list-style-type: none"> ○ <i>The vehicle has not had its required national technical roadworthiness test for more than two years from the date when this was last required;</i> ○ <i>The vehicle has no identification number and the owner of the vehicle is unknown;</i> ○ <i>The vehicle was handed over to an authorised waste storage facility or an authorised waste treatment facility;</i> ○ <i>The repair costs exceed the present value of the vehicle, except for vintage cars or vehicles and the possibility for repair cannot be assumed;</i> ○ <i>The vehicle is not appropriately protected against damage during transportation, loading and unloading, e.g. against damage resulting from using it as "container" for items like spare parts, used EEE or wastes;</i> ○ <i>The vehicle is welded up or closed by insulating foam;</i> ○ <i>The vehicle poses a safety risk or a risk to the environment e.g. by doors not being attached to the car, discharge of fuel or fuel vapour (risk of fire and explosion), leakage within the liquid gas system (risk of fire and explosion), discharge of operating liquids (risk of water pollution caused by fuel, brake fluid, anti-freeze liquid, battery acid, coolant liquid), excessive wear of brake and steering components.</i>
--	--

Chapter 88 – Aircraft, spacecraft, and parts thereof

Note / Heading	Amendment proposal
New Heading	<p>Add new Heading:</p> <p>88.06 – End-of-life aircraft, spacecraft and other equipment, parts and accessories of this Chapter and waste and scrap of aircraft, spacecraft and other equipment, parts and accessories of this Chapter.</p>
Explanatory notes: new Heading / page	<p>Add new heading 88.06 in the HSEN (new page XVI-8806-1):</p> <p>87.17 – End-of-life vehicles and other transport equipment, parts and accessories of this Chapter and waste and scrap of vehicles and other transport equipment, parts and accessories of this Chapter.</p> <p><i>The General Explanatory Note to this Section, Group (x), and the Explanatory Note to heading 84.88 apply, mutatis mutandis, to this heading. However, products of heading 85.49 are excluded.</i></p>

Chapter 89 – Ships, boats and floating structures

Note / Heading	Amendment proposal
Heading 89.08	Replace Heading 89.08 by the following text: 89.08 – End-of-life [ships, boats] [vessels] and floating structures. 8908.10 – Vessels and other floating structures for breaking up 8908.90 – Other
Explanatory notes – Heading 89.08	Replace Heading 89.09 by the following text: 89.08 – End-of-life [ships, boats] [vessels] and floating structures. 8908.10 – Vessels and other floating structures for breaking up 8908.90 – Other
Explanatory notes: new Heading / page	Add new text before the current text in page XVII-8908-1: <i>The General Explanatory Note to this Section, Group (x), and the Explanatory Note to heading 84.88 apply, mutatis mutandis, to this heading. However, products of heading 85.49 are excluded.</i>

5.3

B3140: Waste pneumatic tyres

Chapter 40 - rubber and articles thereof

Note / Heading	Amendment proposal
Heading 40.04	Add the following new subheadings: 4004.10 – Waste pneumatic tyres and scrap thereof 4004.90 – Other
New note	Add new Note: <i>For the purposes of this Chapter, the expression "waste pneumatic tyres" means pneumatic tyres and waste and scrap of pneumatic tyres, which are in such a degraded or worn-out condition as to render them unusable or which cannot be used properly and safely because of breakage, cutting-up, wear or other reasons.</i>
Explanatory Notes – Heading 40.12	Add the following text at the end of the paragraph in the Explanatory Notes of Heading 40.12 on "Used tyres of subheading 4012.20...": Used tyres not suitable for retreading or other waste pneumatic tyres fall within Subheading 4004.10.
Explanatory	Add new subheadings to heading 85.49 in the HSEN:

Notes – Heading 40.04	<p>4004.10 – Waste pneumatic tyres and scrap thereof</p> <p>4004.90 – Other</p> <p>Include Subheading Explanatory Notes</p> <p>4004.10 – Waste pneumatic tyres and scrap thereof</p> <p><i>This category includes worn-out rubber tyres that cannot be re-used for their originally intended purpose and which are not suitable for retreading, and scrap obtained from such worn-out rubber tyres, usually by the following processes :</i></p> <p><i>(a) Cutting the tyre, with a special machine, as close as possible to the tringle bead wires or the heel.</i></p> <p><i>(b) Splitting to remove the tread.</i></p> <p><i>(c) Cutting into pieces.</i></p> <p>The heading excludes used tyres suitable for retreading (heading 40.12).</p> <p>4004.90 – Other</p> <p><i>Insert the complete text of former Explanatory Note of heading 40.04, excluding the reference to worn-out rubber tyres and scrap obtained from such worn-out rubber tyres.</i></p>
--------------------------	--

5.4

A1010, A1020, A1030, A1040, A1080, A1100, A1120: Metal wastes/ compounds

Chapter 26 - ores, slag and ash

Note / Heading	Amendment proposal
Classification opinion	<p>Metal waste and wastes consisting of alloys of tellurium or selenium, which are used for extraction or for the manufacture of their chemical compounds.</p> <ul style="list-style-type: none"> - Heading: 2620.99 Slag, ash and residues (other than from the manufacture of iron or steel), excluding slag, ash and residues containing mainly zinc, lead, copper, aluminium, arsenic, mercury, thallium or their mixtures - Chapter: 26 Ores, slag and ash - Section: V Mineral products

Chapter 38 : miscellaneous chemical products

Note / Heading	Amendment proposal
Note 6. For the purposes of	<p>Add the following text to Note 6. For the purposes of heading 3825, the expression 'other wastes' applies to:</p> <p><i>(x) metal carbonyls</i></p>

heading 3825...	
Heading 38.25	Add the following new subheading: 3825.xx – waste metal carbonyls
Explanatory Note Heading 38.25	Add the following text to Group (D) OTHER WASTES SPECIFIED IN NOTE 6 TO THIS CHAPTER: The heading also covers a wide variety of other wastes specified in Note (6) to this Chapter. They include : <i>(x) waste metal carbonyls</i>

5.5

A1160: Waste lead-acid batteries, whole or crushed

Chapter 85 electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles

Note / Heading	Amendment proposal
Heading 85.4810	Replace Heading 85.4810 by the following text: 85.4820 – Waste and scrap of primary cells and primary batteries, electric accumulators other than lead-acid accumulators; spent primary cells, spent primary batteries, spent electric accumulators other than lead-acid accumulators 85.4830 – Waste and scrap of lead-acid electric accumulators; spent lead-acid electric accumulators
New note	Add new Note: <i>For the purposes of this Chapter, the expression "waste and scrap" means products and scrap which are in such a degraded or worn-out condition as to render them unusable or which cannot be used properly and safely because of breakage, cutting-up, wear or other reasons.</i>
Explanatory Notes – subheading 85.4810	Replace subheading 85.4810 in the HSEN: 85.4820 – Waste and scrap of primary cells and primary batteries, electric accumulators other than lead-acid accumulators; spent primary cells, spent primary batteries, spent electric accumulators other than lead-acid accumulators 85.4830 – Waste and scrap of lead-acid electric accumulators; spent lead-acid electric accumulators Include Subheading Explanatory Notes 85.4820 – Waste and scrap of primary cells and primary batteries, electric accumulators other than lead-acid accumulators; spent

	<p>primary cells, spent primary batteries, spent electric accumulators other than lead-acid accumulators</p> <p><i>This heading covers waste and scrap of primary cells, of primary batteries and of electric accumulators other than lead-acid accumulators, as well as spent primary cells, spent primary batteries and spent electric accumulators other than lead-acid accumulators, as defined in Note 9 to this Chapter.</i></p> <p><i>These products are generally identifiable as waste obtained during manufacture, or consist of primary cells, primary batteries and electric accumulators other than lead-acid accumulators which are definitively unusable as such because of breakage, cutting-up, wear or other reasons, or are not capable of being recharged, and scrap thereof.</i></p> <p><i>These products take the form of consignments and generally come from the manufacturers of primary cells, primary batteries and electric accumulators; from scrap merchants who buy waste and scrap from manufacturers; and from merchants who collect and dismantle electric accumulators or collect primary cells and primary batteries.</i></p> <p><i>Consignments from battery manufacturers may consist of positive plates with a few negative plates; negative plates with a few positive plates; a mixture of positive and negative plates in equal proportion; half-assembled elements (e.g., reels made up of a negative plate and a positive plate separated by a fabric "separator" and coiled). The reels may also be already assembled inside the container. They may also be mixed with defective finished batteries unusable as such.</i></p> <p><i>Consignments from the dismantling or reclamation of old batteries contain a mixture of positive and negative plates, with or without separator, as packs, plates or reels.</i></p> <p><i>Spent primary cells, spent primary batteries and spent electric accumulators are generally intended for processing to recover metals (lead, nickel, cadmium, etc.) metal compounds or slag.</i></p> <p>85.4830 – Waste and scrap of lead-acid electric accumulators; spent lead-acid electric accumulators</p> <p><i>This heading covers waste and scrap of lead-acid electric accumulators, as well as spent lead-acid electric accumulators, as defined in Note 9 to this Chapter.</i></p> <p><i>These products are generally identifiable as waste obtained during manufacture, or consist of lead-acid electric accumulators which are definitively unusable as such because of breakage, cutting-up, wear or other reasons, or are not capable of being recharged, and scrap thereof.</i></p> <p><i>These products take the form of consignments and generally come from the manufacturers of electric accumulators; from scrap merchants who buy waste and scrap from manufacturers; and from merchants who collect and dismantle electric accumulators.</i></p> <p><i>Consignments from accumulator manufacturers may consist of lead plates, half-assembled elements, of mixtures with defective finished accumulators</i></p>
--	---

	<p><i>unusable as such.</i></p> <p><i>Spent electric accumulators are generally intended for processing to recover lead. Spent electric accumulators generally have the electrolyte removed and bear signs of wear.</i></p>
--	---

5.6

A3020: Waste mineral oils unfit for their originally intended use

Chapter 27 mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes

Note / Heading	Amendment proposal
Explanatory Note Heading 27.10	<p>Add the following text to Group (II) Waste Oils:</p> <p><i>Waste oils with a PCB concentration level of 20 mg/kg or more fall within Subheading 2720.91. Waste oils with lower PCB concentrations fall within Subheading 2720.99.</i></p>

5.7

A3090, A3100, A3110: leather and fellmongery wastes

Chapter 41: raw hides and skins (other than furskins) and leather

Note / Heading	Amendment proposal
Explanatory Notes Heading 41.15	<p>Add the following text at Group (II) Parings and other waste: This group covers:</p> <p><i>(x) Sludges containing leather dust, powder and flour</i></p>

Chapter 38 : miscellaneous chemical products

Note / Heading	Amendment proposal
Note 6. For the purposes of heading 3825...	<p>Add the following text to Note 6. For the purposes of heading 3825, the expression 'other wastes' applies to:</p> <p><i>(x) waste chemicals used in the leather or like industries, and their residues</i></p>
Heading 38.25	<p>Add the following new subheading:</p> <p>3825.xx – <i>Waste chemicals used in the leather or like industries, and their residues</i></p>
Explanatory Note Heading 38.25	<p>Add the following text to Group (D) OTHER WASTES SPECIFIED IN NOTE 6 TO THIS CHAPTER:</p> <p>The heading also covers a wide variety of other wastes specified in Note (6) to this Chapter. They include :</p> <p><i>(x) waste chemicals used in the leather or like industries, and their residues</i></p>

	<i>This type of wastes include, inter alia, liming liquor, tanning substances and preparations, finishing agents, dye carriers and dyes.</i>
--	--

5.8

A3180: waste containing PCB or other polybrominated analogues

Chapter 27 mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes

Note / Heading	Amendment proposal
Explanatory Note Heading 27.10	Add the following text to Group (II) Waste Oils: <i>Waste oils with a PCB concentration level of 20 mg/kg or more fall within Subheading 2710.91. Waste oils with lower PCB concentrations fall within Subheading 2710.99.</i>

Chapter 38 : miscellaneous chemical products

Note / Heading	Amendment proposal
Note 6. For the purposes of heading 3825...	Add the following text to Note 6. For the purposes of heading 3825, the expression 'other wastes' applies to: <i>(x) waste containing polychlorinated biphenyls (PCBs) in concentrations of 20 mg/kg or more, polychlorinated terphenyls (PCTs) or polybrominated biphenyls (PBBs)</i>
New note	<i>Waste containing polychlorinated biphenyls (PCBs) in concentrations of 20 mg/kg or more, polychlorinated terphenyls (PCTs) or polybrominated biphenyls (PBBs) are excluded from heading 3824.79. Such products fall in heading 3825.xx.</i>
Heading 38.25	Add the following new subheading: 3825.xx – Waste containing polychlorinated biphenyls (PCBs)) in concentrations of 20 mg/kg or more, polychlorinated terphenyls (PCTs) or polybrominated biphenyls (PBBs)
Explanatory Note Heading 38.25	Add the following text to Group (D) OTHER WASTES SPECIFIED IN NOTE 6 TO THIS CHAPTER: The heading also covers a wide variety of other wastes specified in Note (6) to this Chapter. They include : <i>(x) waste containing polychlorinated biphenyls (PCBs)) in concentrations of 20 mg/kg or more, polychlorinated terphenyls (PCTs) or polybrominated biphenyls (PBBs).</i> <i>However, the heading excludes waste oils contaminated with PCBs (Heading 27.10).</i>

5.9

A4030: Wastes from biocides and phytopharmaceuticals

Chapter 38 : miscellaneous chemical products

Note / Heading	Amendment proposal
Note 6. For the purposes of heading 3825...	Add the following text to Note 6. For the purposes of heading 3825, the expression 'other wastes' applies to: <i>(x) waste insecticides, rodenticides, fungicides, herbicides, anti-sprouting products and plant-growth regulators, disinfectants and similar products</i>
New note	<i>Waste insecticides, rodenticides, fungicides, herbicides, anti-sprouting products and plant-growth regulators, disinfectants and similar products are excluded from heading 3808. Such products fall in heading 3825.xx.</i>
Heading 38.25	Add the following new subheading: <i>3825.xx Waste insecticides, rodenticides, fungicides, herbicides, anti-sprouting products and plant-growth regulators, disinfectants and similar products</i>
Explanatory Note Heading 38.25	Add the following text to Group (D) OTHER WASTES SPECIFIED IN NOTE 6 TO THIS CHAPTER: The heading also covers a wide variety of other wastes specified in Note (6) to this Chapter. They include : <i>(x) waste insecticides, rodenticides, fungicides, herbicides, anti-sprouting products and plant-growth regulators, disinfectants and similar products</i>

5.10

A4130: Waste packages and containers containing Annex I substances in concentrations sufficient to exhibit Annex III hazard characteristics

Chapter 39 : plastics and articles thereof

Note / Heading	Amendment proposal
New Heading	Add new heading: <i>3915.xx of mixed plastics</i>
Explanatory Notes Heading 39.15	Add new heading: <i>3915.xx of mixed plastics</i>
Explanatory Notes Heading	Replace the last paragraph of the Explanatory Notes of Heading 39.23 by the following text:

39.23	<p>The heading excludes:</p> <p>(a) inter alia, household articles such as dustbins, and cups which are used as tableware or toilet articles and do not have the character of containers for the packing or conveyance of goods, whether or not sometimes used for such purposes (heading 39.24), containers of heading 42.02 and flexible intermediate bulk containers of heading 63.05.</p> <p>(b) waste or scrap plastic, of heading 39.15</p>
-------	---

Chapter 63 : other made-up textile articles; sets; worn clothing and worn textile articles;
rags

Note / Heading	Amendment proposal
Note 2	<p>Add the following text to Note 2. Sub-chapter I does not cover:</p> <p><i>(x) waste sacks and bags, of a kind used for the packing of goods, of heading 63.11</i></p>
Heading 63 Section III	<p>Replace heading Section III by the following text:</p> <p>III. WORN CLOTHING AND WORN TEXTILE ARTICLES; RAGS; OTHER TEXTILE WASTES</p>
New Heading	<p>Add new Heading:</p> <p>63.11 Other textile waste</p>
Explanatory Note Chapter 63	<p>Replace GENERAL Note 3. of Chapter 63 by the following text:</p> <p>Under heading 63.09, 63.10 or 63.11 (sub-Chapter III) worn clothing and other worn articles as defined in Chapter Note 3, used or new rags, scrap twine, etc., and other textile waste such as waste sacks and bags for packaging goods</p>
Explanatory Notes New Heading	<p>Add new Heading:</p> <p>63.11 Other textile waste</p> <p><i>This heading covers waste packaging sacks or bags, and other types of textile waste not included in 63.09 or 63.10.</i></p> <p><i>To fall in the heading, these products must be used, dirty or torn, or in small pieces. They are generally fit only for the recovery (e.g., by pulling) of the fibres (which are usually re-spun), for the manufacture of paper or plastics, for the manufacture of polishing materials (e.g., polishing wheels), or for use as industrial wipers (e.g., machine wipers).</i></p>

Chapter 72 : iron and steel

Note 1.	<p>Add the following text to Note 1. In this chapter and, in the case of notes (d), (e) and (f) throughout the nomenclature, the following expressions have the meanings hereby assigned to them:</p> <p><i>(x) Waste packaging or scrap thereof</i></p> <p><i>Waste tanks, casks, drums, cans, boxes and similar containers, waste</i></p>
---------	---

	<i>containers for compressed or liquefied gas, of iron or steel, or scrap thereof</i>
Heading 72.04	Add new heading: 7204.xx Waste packaging of iron or steel, or scrap thereof
Explanatory Note Heading 72.04	Add new heading: 7204.xx Waste packaging of iron or steel, or scrap thereof

Chapter 73 : articles of iron or steel

Note / Heading	Amendment proposal
Explanatory Notes Heading 73.10	Add the following text at the end of the Explanatory Note of Heading 73.10: This heading also excludes : <i>(x) Waste tanks, casks, drums, cans, boxes and similar containers, containers of iron or steel, or scrap thereof, of heading 7204.xx</i>
Explanatory Notes Heading 73.11	Replace the last sentence of the Explanatory Note of Heading 73.11 by the following text: The heading excludes steam accumulators (heading 84.04) and waste containers for compressed or liquefied gas, of iron or steel, or scrap thereof (heading 7204.xx)

Chapter 83: miscellaneous articles of base metal

Note / Heading	Amendment proposal
Explanatory Note Heading 83.10	Add at the end of the paragraph: The heading does not include : <i>(x) Plates for or attached to packaging. This type of plates falls in heading 72.04.</i>

Bibliography

Arcadis & Bio Intelligence Service. (2010). Support to implementation of waste shipment regulation requirements in the customs nomenclature and tariff. Framework contract ENV.G.4/FRA/2008/0112, service request SR9. Report commissioned by the European Commission, DG TAXUD and DG Environment

BIPRO. (2007). Presentation on difficulties in classification of wastes for shipment (Mechelen, 2007); online available via http://www.bipro.de/waste-events/doc/events07/be_presentation_7bipro_fz.ppt#262

Bench, D.; (2008) Identification, Management, and Proper Disposal of PCB-Containing Electrical Equipment used in Mines; EPA. USA

Changdao Mua*, Wei Lina,b, Mingrang Zhanga, Qingshi Zhub. (2003). Towards zero discharge of chromium-containing leather waste through improved alkali hydrolysis., Sichuan University, China

Danish Environmental Protection Agency. (2012). Chromium (VI) compounds: proposal for a restriction. Danish Competent Authority for REACH. Copenhagen

EC DG TAXUD. Feasibility study for new Harmonized System (HS) codes and new HS Explanatory Notes on discarded equipment of Chapters 84 to 95 HS and waste and scrap from such equipment. European Commission Directorate-General Taxation And Customs - in preparation

EEA. (2012). Movements of waste across the EU's internal and external borders. European Environment Agency. Copenhagen. Online available via <http://www.eea.europa.eu/publications/movements-of-waste-EU-2012>)

ETC/SCP. (2009). Data availability on transboundary shipments of waste based on the European Waste List. ETC/SCP working paper 3/2009. Christian Fischer and Claus Davidson. European Topic Centre on Sustainable Consumption and Production

ETC/SCP. (2012). Transboundary shipments of waste in the European Union. Reflections on data, environmental impacts and drivers. ETC/SCP Working Paper 2/2012. Prepared by: Christian Fischer, Harald Junker, Massimiliano Mazzanti, Susanne Paleari, Joachim Wuttke and Roberto Zoboli. European Topic Centre on Sustainable Consumption and Production

ETC/RWM. (2008). Transboundary shipments of waste in the EU, Developments 1995-2005 and possible drivers; ETC/RWM Technical Report 2008/1. Christian Fischer *et al.*

ETRMA. (2012). End of life tyres: A valuable resource with growing potential. 2011 edition. ETRMA (European tyre and rubber manufacturers). Brussels.

Famielec, S. ; Wieczorek-Ciurowa, K. (2011). Waste from leather industry. Threats to the environment. Faculty of Chemical Engineering and Technology, Cracow University of Technology

FAO. (2012). Prevention and disposal of obsolete pesticides. Food and Agriculture Organisation of the UN. Rome. Retrievable from <http://www.fao.org/agriculture/crops/obsolete-pesticides/prevention-and-disposal-of-obsolete-pesticides/en/>

Kojima, M.; Michida, E.. (2011). Economic integration and recycling in Asia: an Interim Report. Institute of Developing Economies. Chiba (JP)

Lundgren, Karin. (2012). The global impact of e-waste: addressing the challenge / International Labour Office (ILO), Programme on Safety and Health at Work and the Environment (SafeWork), Geneva:

Ni, H.-G.; Zeng, E.Y. (2009). "Law enforcement and global collaboration are the keys to containing e-waste tsunami in China", in Environmental Science & Technology, Vol. 43, No. 11, pp. 3991–3994.

Öko-Institut (2010). Building local capacity to address the flow of e-wastes and electrical and electronic products destined for reuse in selected African countries and augment the sustainable management of resources through the recovery of materials in e-wastes. Contribution to component 1: Flows of used and end-of-life e-products from Germany, the Netherlands and Belgium. Öko-Institut . Freiburg/Germany.

Secretariat of the Basel Convention. (2003). Training Manual for the preparation of a national Environmentally Sound Management plan for PCBs and PCB-contaminated equipment in the framework of the implementation of the Basel Convention

Secretariat of the Basel Convention. (1997). Updated technical guidelines for the environmentally sound management of wastes consisting of, containing or contaminated with polychlorinated biphenyls (PCBs), polychlorinated terphenyls (PCTs) or polybrominated biphenyls (PBBs)

Secretariat of the Basel Convention. (2009). Transboundary Movements of Hazardous Wastes Impacts on Human Health and the Environment Magnitude paper. Indonesian-Swiss COUNTRY-LED INITIATIVE (CLI) to improve the effectiveness of the Basel Convention (second Meeting Wildhaus, Switzerland, 12-15 January 2010) available at www.basel.int/convention/cli/index.html

Secretariat of the Basel Convention. (2011a). Revised technical guidelines on environmentally sound management of used tyres and waste pneumatic tyres; Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. Tenth meeting Cartagena, Colombia, 17–21 October 2011

Secretariat of the Basel Convention. (2011b). Where are WEee in Africa? Findings from the Basel Convention E-waste Africa Programme

Secretariat of the Basel Convention. (2012a). Draft technical guidelines on transboundary movements of e-waste and used electrical and electronic equipment, in particular regarding the distinction between waste and non-waste under the Basel Convention, version 22 December 2012.

Secretariat of the Basel Convention. (2012b). Export of hazardous wastes and other wastes in 2009 (as provided by Parties) as at 31 August 2011. Online available via: <http://archive.basel.int/natreporting/datasrces/index.html>

Verma, N. K., (2010). Environmentally Sound Management of E-waste and Practices of Recycling/ Recovery of Valuables from E-waste, presentation made during the 3rd Indo-German Conference on Research for Sustainability (C3): Water and Waste Management.

Annexes

Annex 1 Quantitative data

Waste export reported by Parties of the Basel Convention for 2009 (source Secretariat of the Basel Convention; 2012b):

Annex VIII	Metric tonnes	%
nes	1.262.216	17,69
Y46	900.114	12,61
A1160	705.716	9,89
Y47	687.135	9,63
A3020	374.127	5,24
A2050	332.479	4,66
A1020	275.468	3,86
A1010	251.588	3,53
A4040	228.592	3,20
A4090	205.804	2,88
A4060	197.932	2,77
A2030	149.204	2,09
A4100	146.807	2,06
A1050	145.268	2,04
A1080	131.641	1,84
A4070	112.227	1,57
A3140	102.367	1,43
A3150	96.753	1,36
A3180	84.377	1,18
A1030	78.337	1,10
A1180	77.984	1,09
A3120	68.829	0,96
A3190	58.279	0,82
A2020	58.034	0,81
A4010	53.637	0,75
A1130	46.697	0,65
A4030	38.336	0,54
AC270	30.725	0,43
B1250	27.929	0,39
A4020	24.495	0,34
A1040	22.956	0,32
A2010	22.606	0,32
A1100	21.012	0,29
B1010	17.381	0,24
A4050	16.300	0,23
AD090	12.155	0,17
A3160	9.880	0,14
A4160	9.434	0,13
A3050	7.711	0,11
A1170	5.801	0,08
A1060	5.612	0,08

Annex VIII	Metric tonnes	%
A1070	3.784	0,05
A1190	3.228	0,05
A4080	3.045	0,04
A4150	3.019	0,04
A4130	2.797	0,04
A3070	2.773	0,04
B3060	2.016	0,03
AC170	1.603	0,02
A1170	1.410	0,02
B3010	1.359	0,02
AA060	1.156	0,02
AB070	1.050	0,01
B3030	1.040	0,01
A4110	1.021	0,01
A4140	840	0,01
B1110	638	0,01
A3040	560	0,01
A1120	417	0,01
B1030	298	0,00
B3050	148	0,00
AB030	87	0,00
A2060	65	0,00
B3065	65	0,00
A3080	37	0,00
A3130	33	0,00
A1150	16	0,00
A4120	11	0,00
total	7.136.461	100,00

Export of used vehicles reported by EU-27 Member States (source COMEXT-EUROSTAT)

EU27 Trade Since 1988 By CN8 [DS-016890]

Last update 27.04.12
 Extracted on 23.01.13
 Source of Data Eurostat

FLOW EXPORT
 EU27 (AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK)

REPORTER
 PERIOD Jan.-Dec. 2009

INDICATORS QUANTITY_IN_100KG

PRODUCT/PARTNER	EU27_EXTRA	EU27_INTRA
87012090	5.912.860	1.792.834
87019050	608.337	440.820
87021019	445.254	367.658
87021099	49.225	10.279
87029019	11.240	2.159
87029039	6.870	1.048
87032190	270.488	85.354
87032290	1.172.448	481.020
87032390	4.755.898	1.295.643
87032490	339.154	181.188
87033190	130.669	220.944
87033290	2.754.404	2.555.775
87033390	461.772	599.550
87042139	500.176	270.732
87042199	1.656.991	376.407
87042299	4.631.868	1.621.793
87042399	1.986.997	1.175.074
87043139	23.532	3.258
87043199	77.059	15.636
87043299	61.681	48.890

37.402.985

3.740.299 tonnes

Export of used tyres reported by EU-27 Member States

EU27 Trade Since 1988 By CN8 [DS-016890]

Last update 27.04.12

Extracted on 23.01.13

Source of Data Eurostat

FLOW EXPORT

REPORTER EU27 (AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK)

PERIOD Jan.-Dec. 2009

INDICATORS QUANTITY_IN_100KG

PRODUCT/PARTNER	EU27_EXTRA	EU27_INTRA
40122000	1.449.583	705.164
40122010	:	:
40122090	:	:

2.154.747

215.475 tonnes

Special values:

: not available

Annex 2 Criteria for end-of-life machines and parts thereof, equipment & wreckage, waste and scrap

Any goods must be considered end-of-life machine, waste and scrap if they meet the criteria below:

- (a) the machine is very worn out and not functional because the parts enabling it to perform its essential functions have deteriorated and/or are missing and replacing them would be far too expensive both in their country of origin and their country of destination;
- (b) it has physical flaws which need making good but this would not be cost-effective because it would be much too expensive in both its country of origin and in country of destination where it is to be recycled or destroyed. These faults significantly affect its capacity to function and the equipment cannot pass the functionality tests specific to it.
- (c) it is damaged in ways that prevent it from functioning or make its use dangerous in view of the standards in force in both its country of origin and in country of destination where it is to be recycled or destroyed.
- (d) the equipment's market value, in both its country of origin and its country of destination, in its particularly worn out or damaged condition when declared at customs is significantly lower than that of the same equipment designated for re-use.
- (e) the materials and equipment for protecting the goods from damage during transport and maintaining them are inadequate or entirely absent. For example, if items of equipment are not individually packaged and/or are piled loose in large containers;
- (f) their constituents include certain hazardous components which must be removed or are prohibited by the legislation in force both in their country of origin and their country of destination. E.g. equipment containing asbestos, CFCs etc.;
- (g) they are for scrapping, destruction or recycling rather than for re-use as second-hand goods, used replacement parts or reconstructable parts as part of a standard exchange;
- (h) there is no market for the equipment in its current condition when declared at customs, neither in its country of origin nor in its country of destination; but after processing some materials are re-usable;
- (ij) even if the article contains a small quantity of precious metals and/or some parts that can be re-used directly, which therefore have a significantly higher value than that of ferrous scrap, it is nevertheless to be considered end-of-life equipment, waste and scrap if it has the objective characteristics thereof, i.e. it must be viewed as a whole and in the condition in which it is when declared at customs.

