

# Introduction cross cutting between IED and Waste

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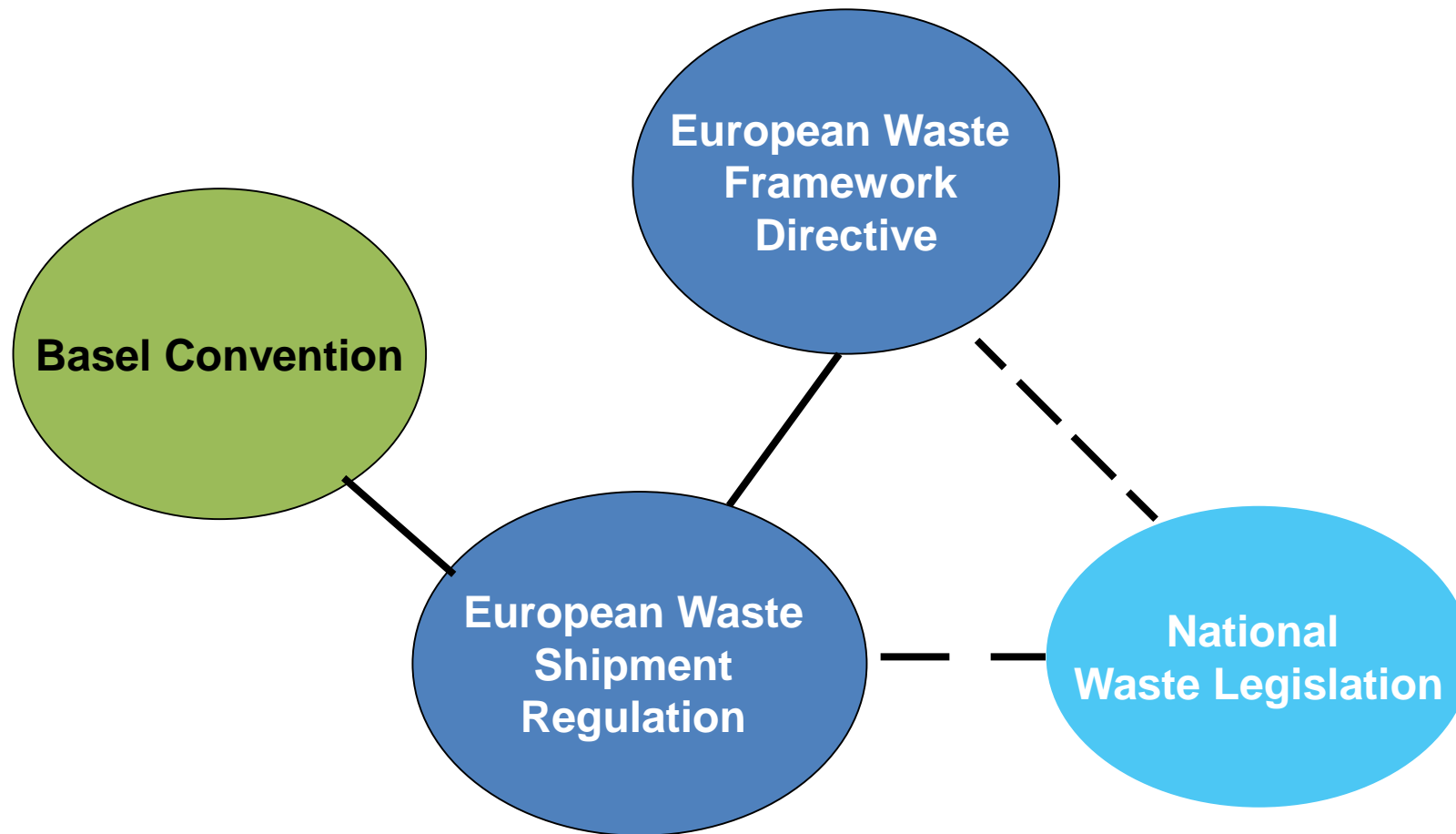


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# European Waste Legislative Framework



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# European Directives and Regulations

## Directives

•A **directive** is a legal act of the European Union which requires member states to achieve a particular result without dictating the means of achieving that result. It can be distinguished from regulations which are self-executing and do not require any implementing measures. Directives normally leave member states with a certain amount of leeway as to the exact rules to be adopted. Directives can be adopted by means of a variety of legislative procedures depending on their subject matter



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## Regulations

A **regulation** is a legal act of the European Union that becomes immediately enforceable as law in all member states simultaneously. Regulations can be distinguished from directives which, at least in principle, need to be transposed into national law.

Regulations can be adopted by means of a variety of legislative procedures depending on their subject matter



# Waste Framework Directive

- History
- Exclusions
- Definitions
- Waste hierarchy
- By-products vs end-of-waste
- List of waste



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# History

- |                              |                              |
|------------------------------|------------------------------|
| •Directive 75/442            | Waste Framework Directive    |
| •Directive 91/689            | Directive on Hazardous Waste |
| •Regulation 259/93           | Waste Shipment Regulation    |
| •Commision Decision 2000/532 | European Waste List          |
| •Directive 2006/12           | Waste Frame Work Directive   |
| •Regulation 1013/2006        | Waste Shipment Regulation    |
| •Directive 2008/98           | Waste Framework Directive    |



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# Exclusions

- ❖ gaseous effluents emitted into the atmosphere;
- ❖ Land
- ❖ uncontaminated soil
- ❖ radioactive waste;
- ❖ decommissioned explosives
- ❖ faecal matter
- ❖ Waste water,
- ❖ animal by-products, except those which destined for incineration, landfilling or use in a biogas or in composting plant
- ❖ carcasses of animals that have died other than by being slaughtered,



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# Definitions

**‘waste’** means any substance or object which the holder discards or intends or is required to discard;

**‘hazardous waste’** means waste which displays one or more of the hazardous properties listed in Annex III;

Also definitions for:

- Waste oils and bio-waste
- Holder, producer, dealer, broker, etc.
- Prevention, re-use, recovery, recycling, regeneration and disposal,



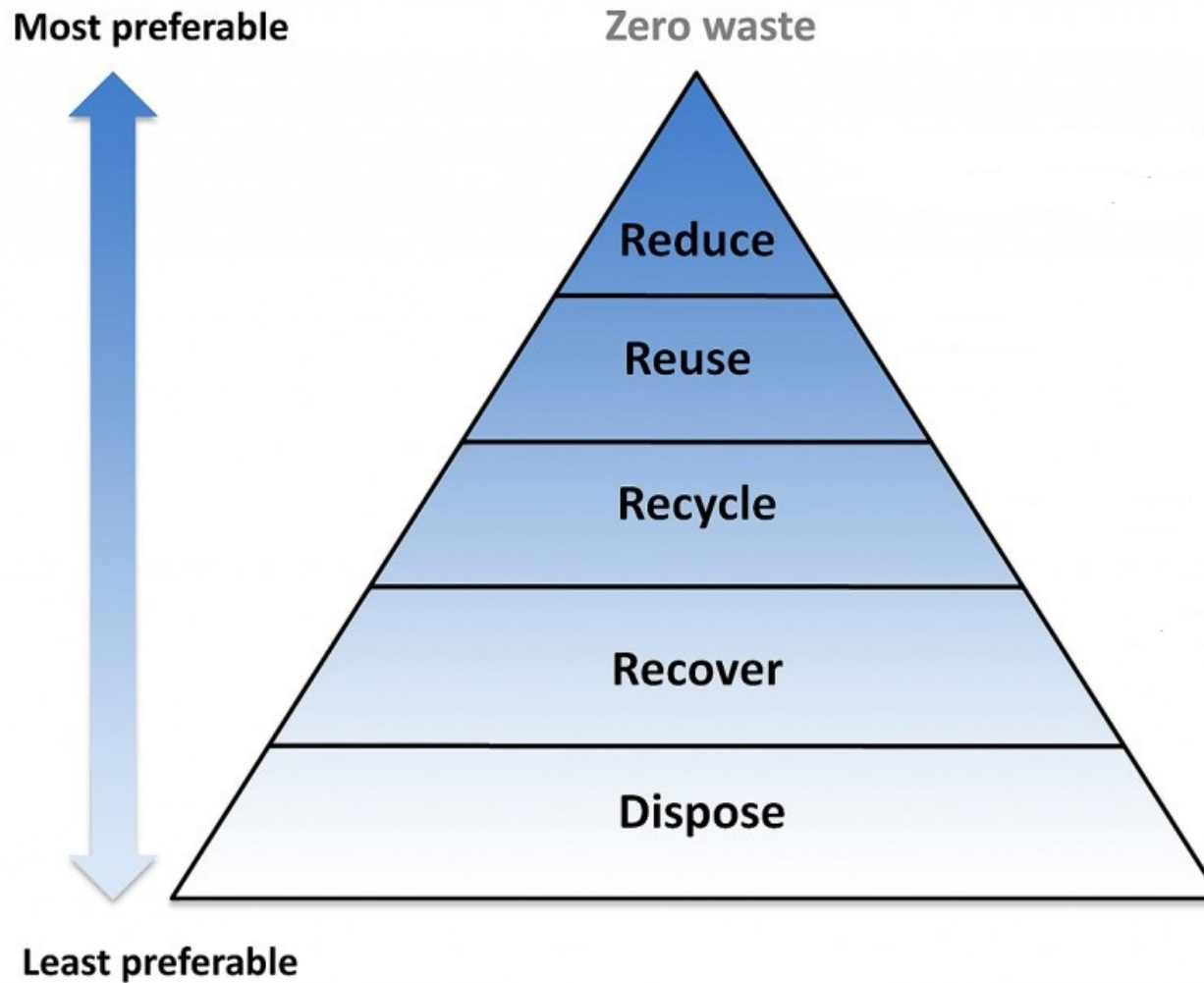
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# Waste hierarchy/ pyramid



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## By- products

A substance or object, resulting from a production process, the primary aim of which is not the production of that item, may be regarded as not being waste but as being a by-product only if the following conditions are met:

- (a) further use of the substance or object is certain;
- (b) the substance or object can be used directly without any further processing other than normal industrial practice;
- (c) the substance or object is produced as an integral part of a production process; and
- (d) further use is lawful, i.e. the substance or object fulfils all relevant product, environmental and health protection requirements for the specific use and will not lead to overall adverse environmental or human health impacts.



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# End of waste

Certain specified waste shall cease to be waste when it has undergone a recovery, including recycling, operation and complies with specific criteria to be developed in accordance with the following conditions:

- (a) the substance or object is commonly used for specific purposes;
- (b) a market or demand exists for such a substance or object;
- (c) the substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products; and
- (d) the use of the substance or object will not lead to overall adverse environmental or human health impacts.

The criteria shall include limit values for pollutants where necessary and shall take into account any possible adverse environmental effects of the substance or object.



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## Example

In a refinery there is made fuel out of crude oil.

One of the other materials which is 'produced' is bituminous material.

This material can be directly used to make asphalt, no further pre-treatment is necessary.

Is this material waste, a by product or has it reached the end of waste criteria?



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## Example 2

Waste, By-product, end of waste?



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# Other topics in the Waste Framework Directive

- Producer responsibility
- Waste management
- Control hazardous waste
- ban on the mixing of hazardous waste
- Waste oil and bio waste
- Permits and registration



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# Waste Framework Directive

## Cooperation

Member States shall cooperate as appropriate with the other Member States concerned and the Commission to draw up the waste management plans and the waste prevention Programmes

## Inspections

Establishments or undertakings which carry out waste treatment operations, establishments or undertakings which collect or transport waste on a professional basis, brokers and dealers, and establishments or undertakings which produce hazardous waste shall be subject to appropriate periodic inspections by the competent authorities.

Inspections concerning collection and transport operations shall cover the origin, nature, quantity and destination of the waste collected and transported.



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# Waste Framework Directive

## Enforcement and penalties

- Member States shall take the necessary measures to prohibit the abandonment, dumping or uncontrolled management of waste.
  - Member States shall lay down provisions on the penalties applicable to infringements of the provisions of this Directive and shall take all measures necessary to ensure that they are implemented.
- The penalties shall be effective, proportionate and dissuasive.



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# Annex I

## **DISPOSAL OPERATIONS**

- D 1 Deposit into or on to land (e.g. landfill, etc.)
- D 2 Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.)
- D 3 Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.)
- D 4 Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.)
- D 5 Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.)
- D 6 Release into a water body except seas/oceans
- D 7 Release to seas/oceans including sea-bed insertion
- D 8 Biological treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12
- D 9 Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12 (e.g. evaporation, drying, calcination, etc.)
- D 10 Incineration on land
- D 11 Incineration at sea (\*)
- D 12 Permanent storage (e.g. emplacement of containers in a mine, etc.)
- D 13 Blending or mixing prior to submission to any of the operations numbered D 1 to D 12
- D 14 Repackaging prior to submission to any of the operations numbered D 1 to D 13
- D 15 Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage, pending collection,



## Annex II

### **RECOVERY OPERATIONS**

- R 1 Use principally as a fuel or other means to generate energy
- R 2 Solvent reclamation/regeneration
- R 3 Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)
- R 4 Recycling/reclamation of metals and metal compounds
- R 5 Recycling/reclamation of other inorganic materials
- R 6 Regeneration of acids or bases
- R 7 Recovery of components used for pollution abatement
- R 8 Recovery of components from catalysts
- R 9 Oil re-refining or other reuses of oil
- R 10 Land treatment resulting in benefit to agriculture or ecological improvement
- R 11 Use of waste obtained from any of the operations numbered R 1 to R 10
- R 12 Exchange of waste for submission to any of the operations numbered R 1 to R 11
- R 13 Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage, pending collection, on the site where the waste is produced)



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## Annex III

### **PROPERTIES OF WASTE WHICH RENDER IT HAZARDOUS**

H 1 'Explosive':

H 2 'Oxidizing':

H 3-A 'Highly flammable':

H 3-B 'Flammable':

H 4 'Irritant':

H 5 'Harmful':

H 6 'Toxic':

H 7 'Carcinogenic':

H 8 'Corrosive':

H 9 'Infectious':

H 10 'Toxic for reproduction':

H 11 'Mutagenic':

H 12 Waste which releases toxic or very toxic gases in contact with water, air or an acid.

H 13 (\*) 'Sensitizing':

H 14 'Ecotoxic':

H 15 Waste capable by any means, after disposal, of yielding another substance, e.g. a leachate, which possesses any of the characteristics listed above.



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## **European Waste List (2000/532/EC)**

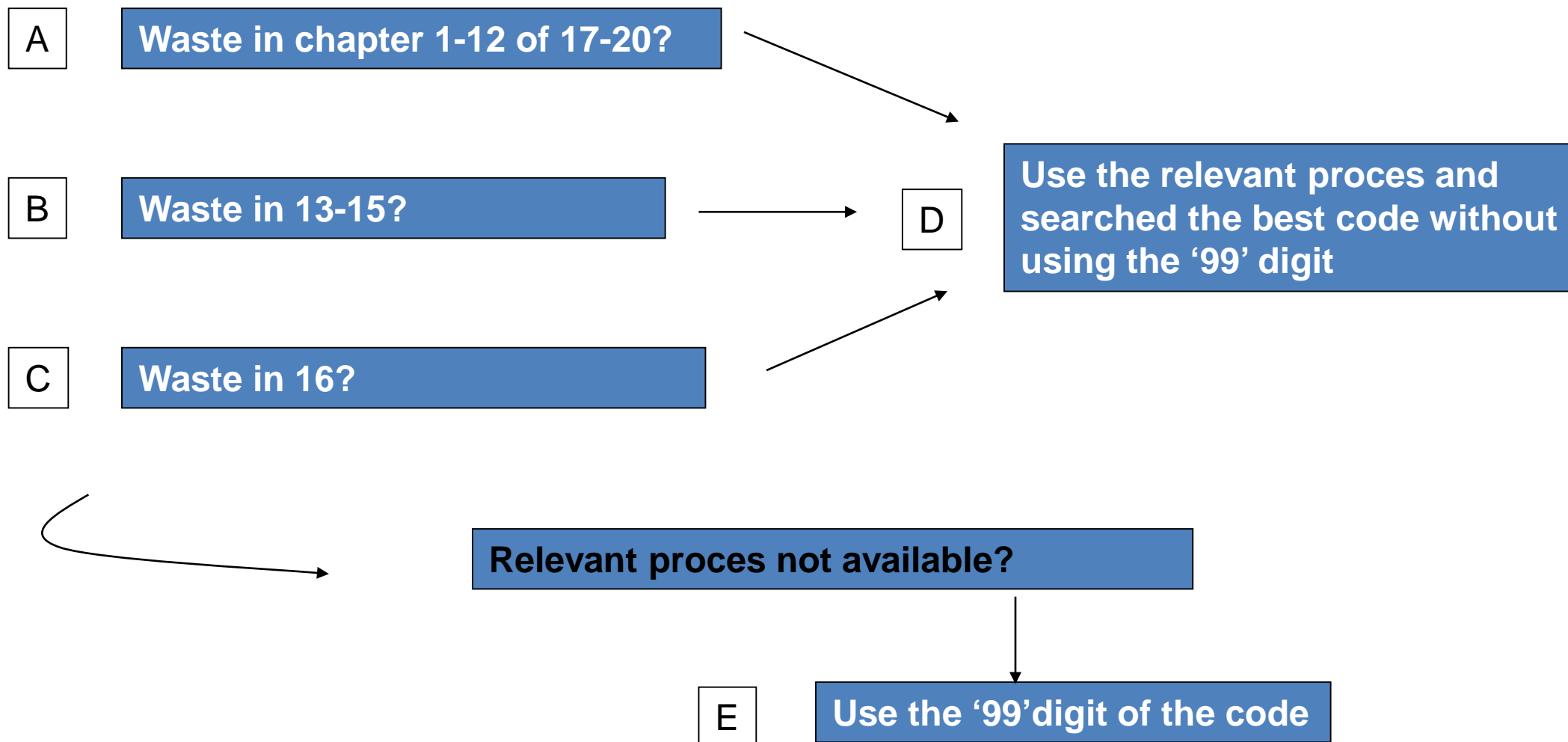
- Identify the source generating the waste in Chapters 01 to 12 or 17 to 20 and identify the appropriate six-digit code of the waste (excluding codes ending with 99 of these chapters). Note that a specific production unit may need to classify its activities in several chapters
- If no appropriate waste code can be found in Chapters 01 to 12 or 17 to 20, the Chapters 13, 14 and 15 must be examined to identify the waste.
- If none of these waste codes apply, the waste must be identified according to Chapter 16.
- If the waste is not in Chapter 16 either, the 99 code (wastes not otherwise specified) must be used in the section of the list corresponding to the activity identified in step one.



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## European Waste List (2000/532/EC)

Any waste marked with an asterisk (\*) is considered as a hazardous waste pursuant to Article 1(4), first indent, of Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.



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# Chapters of the list

- 01 Wastes resulting from exploration, mining, dressing and further treatment of minerals and quarry
- 02 Wastes from agricultural, horticultural, hunting, fishing and aquacultural primary production, food preparation and processing
- 03 Wastes from wood processing and the production of paper, cardboard, pulp, panels and furniture
- 04 Wastes from the leather, fur and textile industries
- 05 Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal
- 06 Wastes from inorganic chemical processes
- 07 Wastes from organic chemical processes
- 08 Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks
- 09 Wastes from the photographic industry
- 10 Inorganic wastes from thermal processes
- 11 Inorganic metal-containing wastes from metal treatment and the coating of metals, and non-ferrous hydrometallurgy
- 12 Wastes from shaping and surface treatment of metals and plastics
- 13 Oil wastes (except edible oils, 05 and 12)
- 14 Wastes from organic substances used as solvents (except 07 and 08)
- 15 Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
- 16 Wastes not otherwise specified in the list
- 17 Construction and demolition wastes (including road construction)
- 18 Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)
- 19 Wastes from waste treatment facilities, off-site waste water treatment plants and the water industry
- 20 Municipal wastes and similar commercial, industrial and institutional wastes including separately collected fractions



# 10 Inorganic wastes from thermal processes

## 10 01 Wastes from power stations and other combustion plants (except 19)

10 01 01	Bottom ash
10 01 02	Coal fly ash
10 01 03	Peat and (untreated) wood fly ash
10 01 04*	Oil fly ash
10 01 05	Calcium-based reaction waste from flue gas desulphurisation in solid form
10 01 06	Other solid waste from gas treatment
10 01 07	Calcium-based reaction waste from flue gas desulphurisation in sludge form
10 01 08	Other sludges from gas treatment
10 01 09*	Sulphuric acid
10 01 11	Aqueous sludges from boiler cleansing
10 01 12	Spent linings and refractories
10 01 13*	Fly ash from emulsified hydrocarbons used as fuel
10 01 99	Wastes not otherwise specified





## Basel Convention

**“Seeks to protect human health and the environment from harm which may be caused by generation and management of hazardous wastes”**

Adopted on 22 March 1989, entered into force on 5 May 1992. 181 Parties (as at June 2014)

1. The minimization of the generation of hazardous and other wastes
2. The requirement of environmentally sound management (ESM) of hazardous wastes and other wastes
3. The regulation of the transboundary movement of hazardous wastes and other wastes through the prior informed consent procedure (PIC).



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## Prior informed consent (Article 6)

This means that imports, transits and exports of wastes that fall under the Basel Convention are only allowed when

**all involved Parties have given their consent**  
**before the movement is initiated.**



# **Waste classification according the Basel Convention**

Annex I: Categories of wastes to be controlled (Y-codes)

Annex II: Categories of wastes requiring special consideration (Y-codes)

Annex III: List of hazardous characteristics (H-codes)

Annex VIII – List A

Wastes characterized by the BC as hazardous waste (A-codes)

Annex IX – List B

Wastes characterized by the BC as non-hazardous waste (B-codes)



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# Illegal Traffic According to the Basel Convention (Article 9)

1. For the purpose of this Convention, any transboundary movement of hazardous wastes or other wastes:

(a) without notification pursuant to the provisions of this Convention to all States concerned; or

(b) without the consent pursuant to the provisions of this Convention of a State concerned; or

(c) with consent obtained from States concerned through falsification, misrepresentation or fraud; or

(d) that does not conform in a material way with the documents; or that results in deliberate disposal (e.g. dumping) of hazardous wastes or other wastes in contravention of this Convention and of general principles of international law,

shall be deemed to be illegal traffic.



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## European Waste Legislative Framework

### Waste Framework Directive 2008/98/EC

Provides for a general framework of waste management requirements and sets the basic waste management definitions for the EU.

### Decision 2000/532/EC establishing a list of wastes

Establishes the classification system for wastes, including a distinction between hazardous and non-hazardous wastes.

### Regulation (EC) No 1013/2006 on shipments of waste

This Regulation specifies under which conditions waste can be shipped between countries.



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# **European Waste Shipment Regulation (EC) 1013/2006**

The Regulation is divided in the following titles:

- I. Scope and Definitions
- II. Shipments within the Community with or without transit through third countries
- III. Shipments exclusively within Member States
- IV. Export from the Community to third countries
- V. Imports into the Community from third countries
- VI. Transit through the Community from and to third countries
- VII. Other provisions

+ Annexes



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## Application and Scope of the WSR (article 2)

The WSR sets procedures and control regimes for the shipment of waste, depending on the origin, destination and route of the shipment, the type of waste shipped and the type of treatment to be applied to the waste at its destination.

- Between MS (also if routed through third countries)
- From third countries into EU
- From EU towards third countries
- Between third countries via EU countries



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## **Excluded from the WSR**

Excluded from the WSR are **shipments of waste covered by other provisions**, such as radio active waste, animal by-products not intended for human consumption, waste generated at the normal operation of a ship or shipments within individual Member States.

Also waste imports into the Community of waste generated by **armed forces or relief organisations in situations of crisis, peacemaking or peacekeeping operations** where such waste is shipped, by the armed forces or relief organisations concerned or on their behalf, directly or indirectly to the country of destination are excluded from the scope.



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## Key definitions (article 2)

- Waste (refers to the WFD)
- Operations (refers to the WFD)
- Environmentally Sound Management
- Non-governmental actors, e.g. producer, holder, notifier
- Governmental actors, e.g. competent authorities, customs
- Illegal shipment

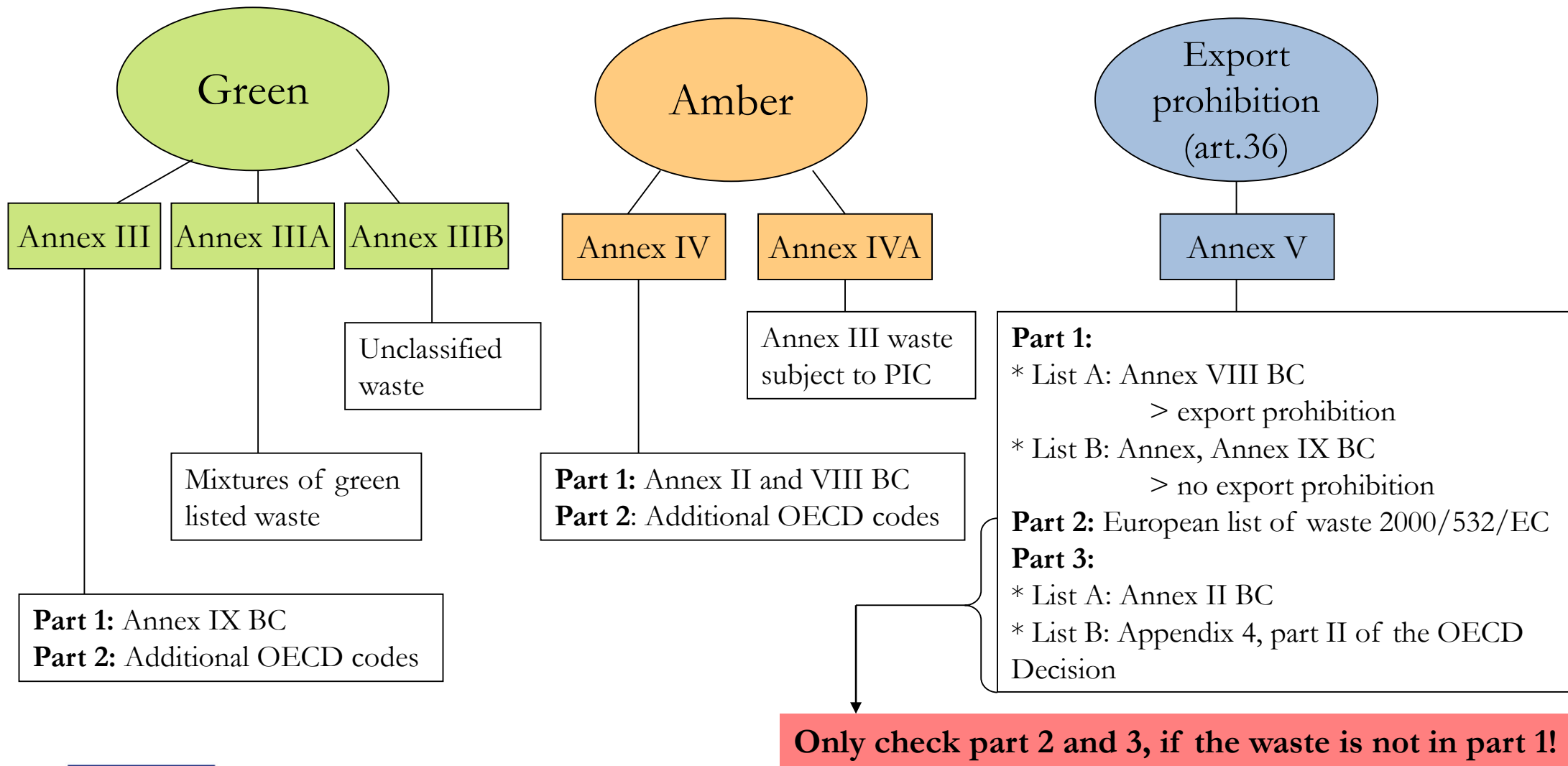


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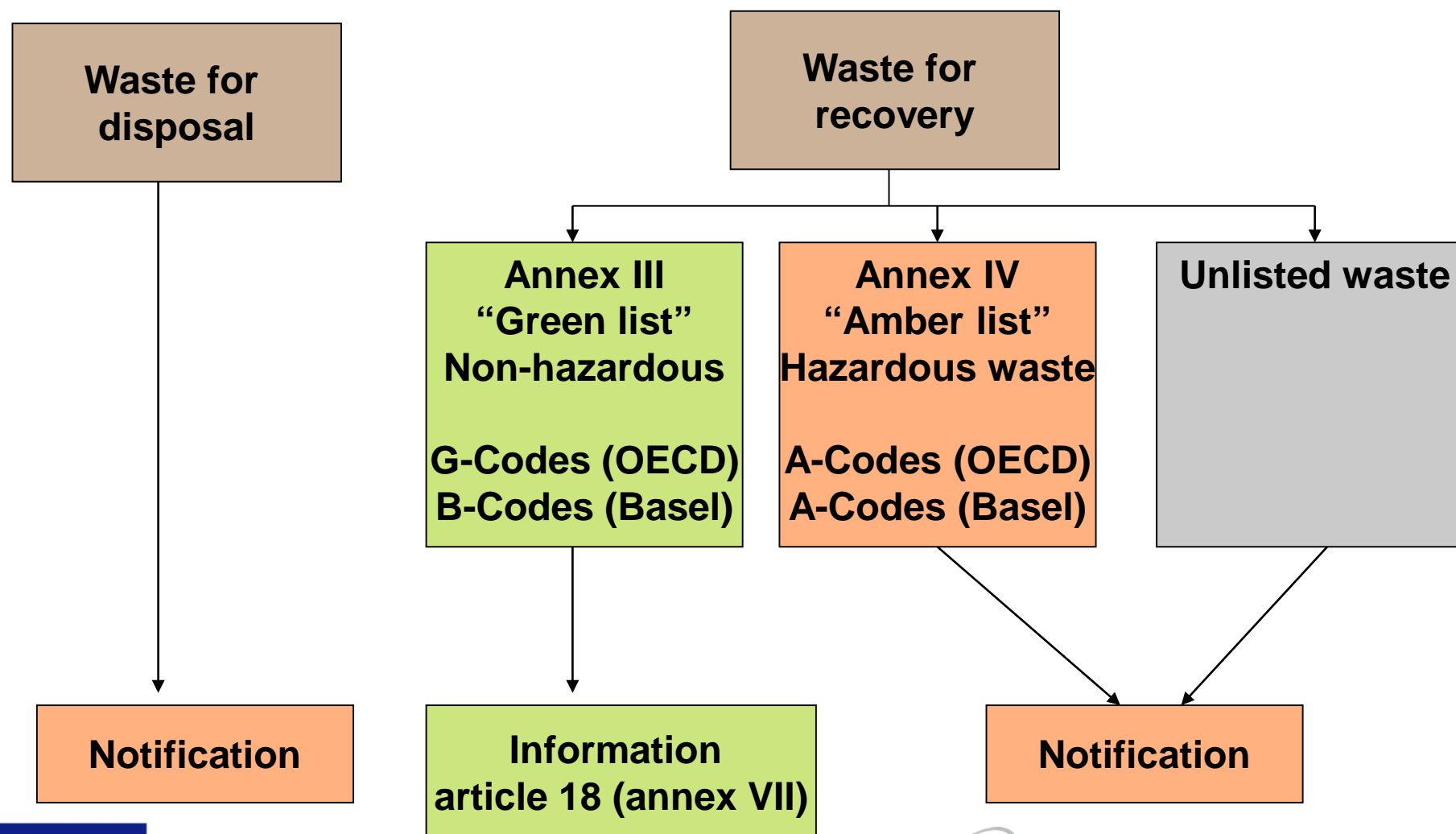


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# Waste annexes to the WSR



## Provisions for notifications for waste shipments between Member States



## Requirements for movements of green listed waste (art. 18)

- Waste listed on annex III, IIIA or IIIB (>20 kg)
- Shipments of waste explicitly destined for laboratory analysis to assess either its physical or chemical characteristics or to determine its suitability for recovery or disposal operations (max. 25 kg)

### **Waste must be accompanied by Annex VII document**

1. Signed by the person who arranges the shipment before the shipment takes place and shall be signed by the recovery facility or the laboratory and the consignee when the waste in question is received!
2. Contract in place.



## Notification process (1/2)

### 1. Application or Notifiatiion:

- Notification and movement documents + supporting information (such as contract, financial guarantee, insurance and recovery information) to CA of dispatch

### 2. Assessment

- By CA of dispatch within 3 working days after receiving the notification package
- CA of dispatch transmits notification to CAs of destination and transit (3 working days for initial check). Right to ask for additional info (annex II, part 3). Block 19
- CAs of dispatch and destination have 30 days to: agree (with -block 21 - or without conditions – block 20) or object



## Notification process (2/2)

### 3. Moving the waste

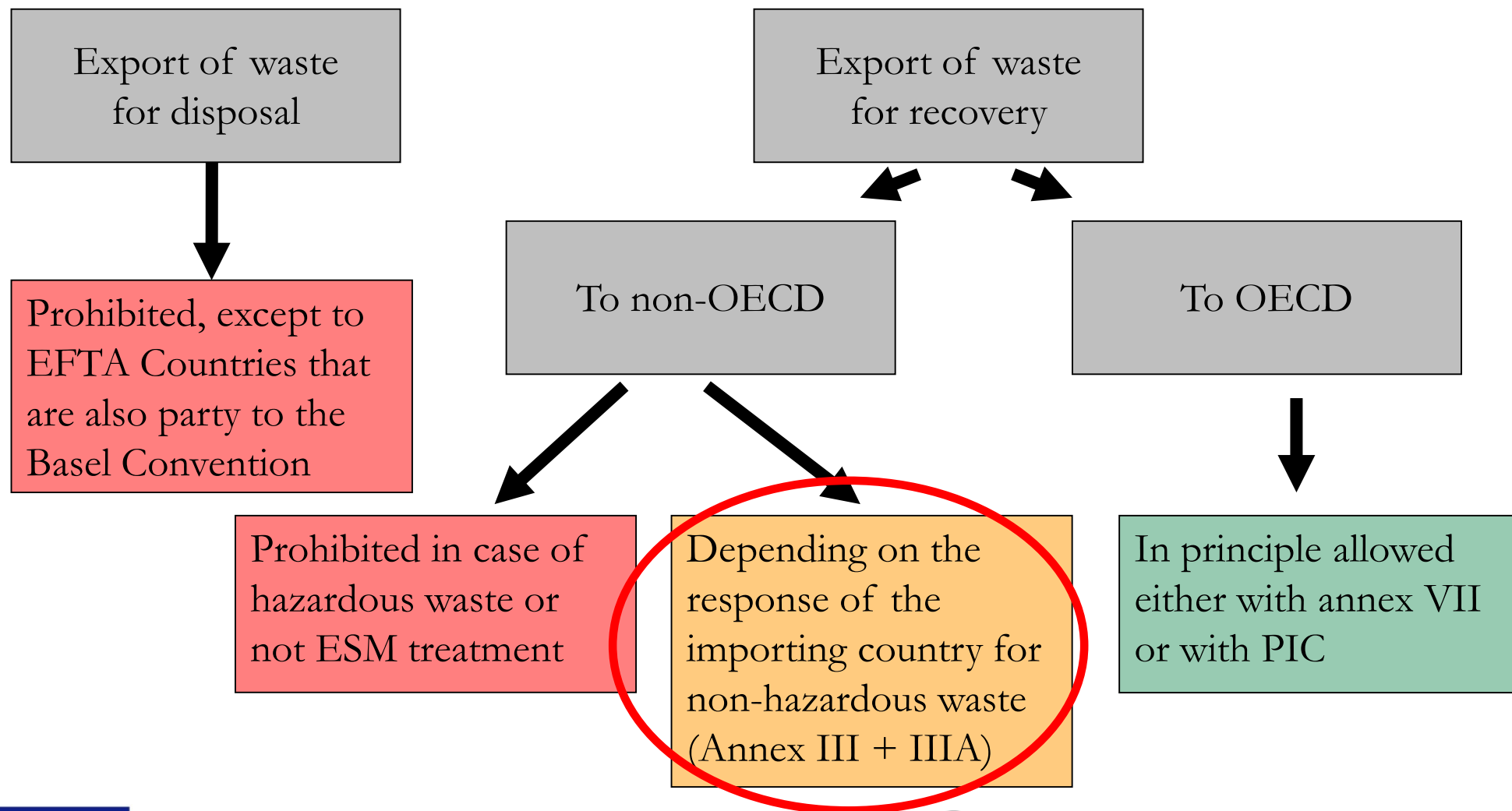
- Only if all written consents and financial guarantee arrangements are in place
- 3 working days notice before the actual shipment to all CAs and the receiver of the waste by completing the movement document
- Relevant documentation must accompany the waste at every stage of its journey

### 4. Processing the waste

- At arrival complete block 18 ('certificate of receipt')
- Send within 3 working days to the notifier and all CAs
- Max 30 days after recovery/disposal of the waste complete block 19. Copies to all CAs and notifier



## Export of waste to third countries



## True or false?

**Waste Acid Lead Batteries can be shipped  
with a notification  
from the Sweden  
to Serbia  
for recovery?**



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# Export of non-hazardous waste to non OECD countries

## Commission Regulation 1418/2007

The Commission sends a [written request](#) to each non OECD country, seeking:

- (i) confirmation in writing that the waste may be exported from the Community for recovery in that country, and
  - (ii) an indication as to which control procedure, if any, would be followed in the country of destination.
- 
- (a) a prohibition; or
  - (b) a procedure of prior written notification and consent; or
  - (c) no control in the country of destination (***always art 18 information***), or
  - (d) other control procedures in the country of destination



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## Illegal shipment of waste (art.2(35)) WSR

- Without notification
- Without consent
- With consent obtained through falsification or misinterpretation
- Not in accordance with the accompanying papers
- Resulting in recovery or disposal in contravention to international or Community rules
- Contrary to articles 34, 36, 39, 40, 41 and 43
- Not in accordance with the requirements of article 18



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## Enforcement of the WSR (art. 50)

Member States shall:

- ☐ Lay down the rules on penalties
- ☐ Take measures to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive.
- ☐ Provide, *inter alia*, for inspections of establishments and undertakings of waste facilities, and for spot checks on shipments of waste or on the related recovery or disposal.
- ☐ Cooperate, bilaterally or multilaterally, with one another in order to facilitate the prevention and detection of illegal shipments
- ☐ Identify those members of their permanent staff responsible for the cooperation and inform the Commission



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## Amendments to the WSR

Some key elements of the adopted proposal:

- Establishment of Inspection Plans
- Enhanced powers of authorities involved in inspections (reversed burden of proof)
- Cooperation of Member States
- Access to information



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## Cross cutting aspects

Is the input material raw material or waste?

Is there other material produced?

Is this a by product or waste?

Is there gas treatment?

If there is any waste being used for input or produced  
where is it coming from or where is it going to?

Are the right procedures being followed?



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## example

An energy power plant is 'producing' fly ash.

Is this ash waste, a by product or has it reached the end of waste criteria?

This fly ash is being exported from Montenegro to Italy to be used for road construction.

Does this fly ash still has to be considered as waste?

Is it allowed to ship this material to Italy?

Are there any laws, regulations, conventions in place?



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Thank you very much for your attention.

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