



Association of Cities and Regions for Recycling and sustainable Resource management

# Individual Producers' responsibility for WEEE in Europe

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## Structure

- 1. Directive 2002/96/EC (reminder)**
2. « Individual Producer Responsibility »  
according to Directive 2002/96/EC
3. Different organisation models
4. Issues for Public authorities



**17 to 20 kg WEEE /inhab. /year**

**Growing from 3 to 5 % /year**

**Resources => products => ?**





## 1.1. Directive 2002/96/EC « WEEE »

+

- Directive 2002/95/EC « ROHS »
- Directive 2005/32/EC « EUP »
- EC Regulation 2037/2000 on Ozon depleting substances
- REACH
- Directive on Batteries
- « Integrated Product Policy »
- ...



## 1.2. Scope of application of Directive 2002/96/EC (Annex 1A)

1. Large household appliances
2. Small household appliances
3. IT and telecommunication equipment
4. Consumer equipment
5. Lighting equipment
6. Electrical and electronic tools  
(with the exception of large-scale stationery industrial tools)
7. Toys, leisure and sport equipment
8. Medical devices  
(with the exception of all implanted and infected products)
9. Monitoring and control instruments
10. Automatic dispensers



### 1.3. Content of Directive 2002/96/EC (1)

- Sets minimum requirements (art. 175 1° EC Treaty)
- Individual Producer Responsibility
  - Art. 4 Eco-design
  - Art. 8 Financing
- Systems for separate collection (art. 5)
- WEEE from households : 4 kg/inhab./year on 31/12/06 (art. 5, 2°)
- Distributors : take back obligation 1:1
- Reuse > recycling > recovery (art. 7)
- « Best Available Techniques », authorisation system, exportation  
⇔ same conditions of treatment (art. 6)
- Information of users (marking) (art. 10)  
& of treatment plants (art. 11)
- Register of Producers and reporting to the Commission (art. 12)



## 1.3. Content of Directive 2002/96/EC (2)

Categories of appliances	Reuse and recycling targets	Recovery targets
Large household appliances and automatic dispensers	75%	80%
Small household appliances, lighting equipment, electrical and electronic tools, toys, leisure and sport equipment	50%	70%
IT and telecommunications equipment, and consumer	65%	75%
Discharge lamps	80%	-

\* (% by average weight per appliance sent for treatment)



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## 2.1. Motivations

« Individual Producer Responsibility » (IPR)  
=> Eco-design...

- + reduction of global costs
- + creation of specific management channels
- + reduction of waste management costs for  
LRAs



## 2.2. IPR according to Directive 2002/96/EC

- products put on the market > 13.08.2005  
(historical WEEE) : COLLECTIVE responsibility
- products put on the market < 13.08.2005 :  
INDIVIDUAL responsibility =
  - 1) each producer bears the management costs of his own WEEE :
    - collection as from the « collection point »
    - sorting
    - transport
    - treatment
  - 2) management of the responsibility : individual or collective



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### 3.1. Types of organisations

	Individuals	One collective system at national level	'Clearing Houses'	'Paneuropean' system
<b>Characteristics</b>	Final holder can be identified	Small markets/ territories	Big markets/ territories	Factor for harmonisation at the European level
	Non household EEE « B2B »	Useful to manage historical WEEE	'multiplicity' of actors'	...1 reporting instead of 25 ?
	Service to client Image	Responsible for the collection, recycling, financing,	Attribution of responsibilities Monitoring and reporting	
		Pioneer systems	Young systems	Young system'
<b>Advantages /drawbacks</b>		Possible Economies of scale	Possible cost reduction through competition	Possible réduction thanks to administrative simplification
	Possible remanufacturing			Possible remanufacturing
		Investment into consumers' information		!! local specificities !! logistic management costs
		Recycling rates >> legal rates		
		Monopolistic tendencies		

Source : Implementation of the WEEE Directive in the EU, IPTS 2006



## 3.2. Performances

	Recupel	ICT milieu	NVMP	EI Kretsen	EI Retur	SWICO
<b>Country</b>	Belgium	Netherlands	Netherlands	Sweden	Norway	Switzerland
<b>Creation</b>	2001	1999	1999	2001	1999	1994
<b>Quantity of WEEE per inhabitant (2002)</b>	4	0,58	4,3	8,4	8	3,3
<b>Total « costs » (2002)</b>	1.36	0.48	0.61	0.47	0.60	0.80
<b>Visible fee</b>	Yes	No	Yes	No	Yes	Yes
<b>Historical WEEE</b>	Yes	No	Yes	No	Yes	No
<b>Household/ Non Household</b>	H	H/NH	H	H/NH	H/NH	H/NH



### 3.3. « Costs »

	RECUPEL	ICT Milieu	NVMP	EI Kretsen	EI Retur	SWICO
Total "costs" per collected kg (including overheads/ reserve funds (2002))	1.36	0.48	0.61	0.47	0.60	0.80

Source : Implementation of the Waste Electric and Electronic Equipment Directive in the EU, IPTS (for the European Commission) 2006



### 3.4. « Costs » (2)

Equipment type	Digital Camera	Desktop Computer	Consumer Inkjet Printer	Flat Screen Monitor
Take Back Fee in Belgium ( <a href="http://www.recupel.be">www.recupel.be</a> ) (1)	1.24 €	2.48 €	1.65 €	4.96 €
Take Back Fee in Switzerland (2) VFG includes cost of additional services (e.g. packaging & battery Take Back)	1.00 €	6.00 €	3.00 €	6.00 €
HP Take Back Cost Norway	0.10 €	3.80 €	1.33 €	3.42 €
HP Take Back Cost Sweden	0.06 €	2.20 €	0.77 €	1.98 €
HP Take Back Cost Netherlands	0.07 €	2.70 €	0.95 €	2.43 €
Cost of Take Back in Spain (ERP)	0.01 €	0.50 €	0.18 €	0.81 €
Cost of Take back in Austria (ERP)	0.02 €	0.83 €	0.34 €	1.49 €
Cost of Take Back in Germany (ERP)	0.01€	0.38 €	0.12 €	0.29 €

Source : HP news release 2 juin 2006



## 3.5. Financing : efficiency <> precision

### Types of fees

- Fixed fee per unit\*
- Fixed fee per kg (El Kretsen, SE)
- Fixed fee per product range  
(SWICO, CH)

\* (RECUPEL (B), NVMP (NL), EL-RETUR (NO), SWICO (CH))





## 3.6. Financing : efficiency <> precision (2)

### Calculation method

- between producers :
  - Costs for each producer individually OR according to its market share ?
  - Effective recycling costs OR actual & future costs ?
- between sectors : cross-subsidiation ?



## 3.7.Financing : efficiency <>precision (3)

Costs' coverage : which ones ?

- Appliances taken in charge ?
- Collection : from where ?
- Operative costs (collection, transport, treatment...) and additional costs (R&D, kick backs, reporting, monitoring, sorting of appliances...)
- Existing treatment requirements
- Information & communication requirements
- ...



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## 4.1. Collection infrastructure

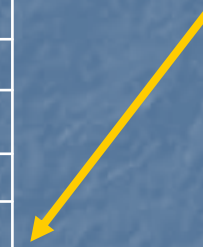
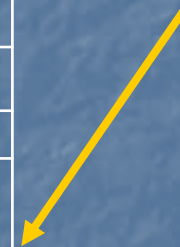
	Belgium	Denmark	Netherlands	Norway	Sweden	Switzerland
Municipal collection points	x	x	x		x	
Distributors / retail				x		x

Source : ACR+ study 2003



## 4.2. Responsibilities and financing

Countries	Collection and sorting up to the « collection point »	
	<i>Management</i>	<i>Financing</i>
Austria / Germany /Netherlands /Sweden /	Municipalities	Producers Municipalities
Belgium	Municipalities	Producers
Norway	Municipalities Distribut./Retailers	Municipalities Distribut./Retailers
Switzerland, Poland, Slovakia	Producers/ Retailers	Producers/ Retailers





## 4.3. Compensation – Belgium (1)

		<b>Part fixe</b>	<b>Part Variable</b>
<b>Région Wallonne</b>	Parc à Conteneur	1237 €/an	15,83 €/T
	Parc à Conteneur + centralisation	1237 €/an + 7,5%	15,83 €/T + 7,5%
	PAC + Centre de Transfer Régional	165 €/T < 3kg/hab. 100 €/T > 3kg/hab. Communication : 0,025 €/hab/an	

### **Flemish Region**

Producers' compensation on Container Parks =  
Tot. inhab. IC x 0,6 x VA / tot. inhab. Flanders +  
Waste Qties IC x 0,4 x VA / Tot. Qties Waste from previous year



## 4.4. Compensation (2)

### Flemish Region

$$\underline{VA = 1,1 \times C \times [(I \times n) + (0,5 \times h \times P + 0,5 \times f \times P)]}$$

1,1 = 10 % overheads

C = number of container parks

I = costs of infrastructure

N = part of waste concerned

H = time dedicated to waste concerned (8,6% for WEEE)

P = personal costs

F = frequency of waste concerned (6,8 % for WEEE)



## 4.5. Revision of Directive 2002/96/EC

2005 Implementation study – Outline of Impact Assessment

2006 Studies - Research

2007 Separate exercises with « stakeholders »  
Impact assessment

2008 Formal proposal

- ⇒ New scope of application
- ⇒ New targets (collection, reuse, recycling...)
- ⇒ Clarification of Individual Producer Responsibility  
(design, collection, treatment, financing, information)
- ⇒ Standards for treatment





## 4.6. From LRA's point of view : need to clarify

- stakeholders' competencies  
(collection, sorting, treatment, reporting, reuse...)
- costs' coverage
- monitoring modalities  
(fees, recycling rates, treatment standards, free riders...)
- public awareness ....



## 4.7. Beyond

### **Ecodesign : ?**

- DEEE + LUSD + REACH + IPP (?) ...
- What about reuse ?
- Quid of the use of secondary raw materials ?

### **Targets :**

- **4 kg** => xx kg?
- By types of appliances or by material ?

### **Illegal exportations : ?**



## 4.8. ACR+ : « A Forum for Public Authorities on WEEE management » (1)

### Who ?

Public Authorities  
(local, regional, national)

### Why ?

- clarification of above-mentioned issues
- + protection of general interest
- + preservation of public services
- + international exchanges of information and experiences (data, facts, figures)
- + participation in the revision process

...



## 4.9. ACR+ : « A Forum for Public Authorities on WEEE management » (2)

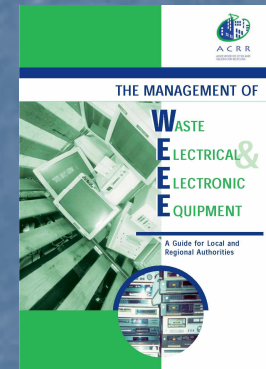
### How ?

Permanent working group within **ACR+**

- presidency :
  - C. Durand (Nantes, AMORCE)
  - Chr. Delatter (VVSG - Interafval)
- biennial meetings focused on :
  - \* a synthesis report for each participant
  - \* the deepening of one or the other aspect (prepared by ACR+ secretariat)
- ACR+ website (+ virtual forum ?)

## 4.10. ACR+ : « A Forum for Public Authorities on WEEE management » (3) ... & the updating of ACR+ report

1. The WEEE issue
2. The European WEEE Directive
3. Initiatives already undertaken in some EU countries  
(B, NL, NO, S, CH, DK)
4. Collection and sorting of WEEE
5. Pre-treatment and recycling
6. Repair and reuse of old appliances
7. Evolving role for LRAs (ecodesign, repair and proper use of products...)



<http://www.acrplus.org/technical-reports>  
(updated in Autumn 2004)



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**Thank you for your attention**