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## **Product Responsibility - Germany**

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### I. Some factual background

Waste production in Germany 1999: 390 Mio t waste per year.

- 57 % construction sector
- 14 % minerals extraction
- 15 % industry
- 12 % households

1/3 waste disposed (deposit, incineration)

2/3 waste recovered (material, energy)

Controversy about material or energetic recovery strategies. Material recovery supposed to be more efficient use of material matter.

#### Household waste

- 1/3 recycled (paper, packages including plastics, compostable matter, glas) (75 % of glas containers recycled, 60 % of plastic materials).
- 2/3 disposed
  - 2/5 incinerated, with a differing degree of energy recovery
  - 3/5 landfill

Germans are regarded to be world champions in separating waste. Consider Bremen as a proof:

- paper (collected bi-weekly, private service)
- packages ("yellow bag" (collected bi-weekly, Dual System Inc., see below)
- glas (compulsory pledge schemes for tin cans and bottles except wine and milk bottles; containers in neighbourhood, private service)
- compostable matter (separate bin for the house, collected bi-weekly, communal service)
- residual waste per week (separate bin for the house, collected bi-weekly, communal service)
- bulk household waste (collected free of charge on individual request, communal service)
- hazardous waste (drugs, paints): to be brought to special collection point (communal service)

As the fee for waste removal is due only for residual waste, but not for the collection of recyclable waste, there is an incentive to collect waste for recycling waste. However, the incentive to even avoid waste is weak.

#### **Construction** waste

- 85 % recycled
- 15 % deposited

#### **Industrial waste**

- 5-10% per year reduction in production 1990 1996
- 1/3 recycled
- 2/3 incinerated or deposited

## Sludge from water treatment

- 2/3 recycled
- 1/3 incinerated or deposited

## II. Background on general waste law

#### 1. Development of concepts and legislation

- former times: communal bye-laws on waste collection; public service
- sixties: focus on proper disposal, state level
  - state laws on collection and disposal
- seventies: focus on proper disposal, federal level
  - 1977 Federal Law on safe disposal of waste
- eighties: focus on hazardous waste
  - 1986 Federal Waste Law
- nineties: focus on prevention and recovery
  - 1994 Federal Law on Waste and Closed Cycle Economy
- 2000 et seq.: shift of focus from the waste producer to the product producer

## 2. Terminology

Waste = Any substance or object which the holder discards or intends to discard or is required to discard.

The distinction between waste for recovery and normal products is sometimes difficult to draw.

Cases of controversy:

- alternative use of products, e.g. car tires used to weigh down cover hoods in agriculture
- couple production, e.g. use of sawdust for pressed wood
- repair, e.g. remoulding of tires

Recovery means that the main goal of the handling of the waste is to utilise it. Disposal means that the main goal is to get rid of the waste (although the treatment may lead to a certain recovery of matter or energy).

These terms trigger different regulatory regimes. In general, waste for recovery is less strictly regulated than waste for disposal.

Therefore, there is a temptation to declare waste for disposal as waste for recovery. For instance, incineration may be declared as recovery of energy, the use of material for the filling of mining caves may be declared as a substitute for sand or gravel, etc.

#### 3. Basic duties

According to Art. 4 of the German Act on Waste and a Cyclical Economy which is based on Art. 3 EC Directive 75/442 there is a hierarchy of basic obligations:

- (1) Prevention of waste
- (2) Recovery
- (3) Safe disposal

The hierarchy is not absolute but can be disregarded for technical, economical or ecological reasons.

The legal instruments aiming at prevention of waste have remained scarce. They have focussed on prevention duties in relation with dangerous installations and with product design concerning certain product categories (such as batteries, cars, electronic devices, see below). The relative success of recovery tends to discourage prevention.

## 4. Responsibility for waste production and handling

EC law leaves the question open who shall be in charge of managing recovery and disposal.

In Germany, disposal of waste has traditionally been the responsibility of the public (mostly communal) service. By contrast, recovery of waste is generally left to the private sector, except for recovery of household waste where both public and private services coexist.

#### **Household waste:**

*Waste for disposal*: Waste holders must hand the waste over to the communal disposal service. The local authorities are obliged to safely dispose of them, either by deposit or by incineration.

*Waste for recovery*: Waste holders may recover waste by themselves (e.g. private composting). Otherwise they have to hand it over to the communal recovery service. However private companies may offer recovery services if registered with the local authority.

#### **Industrial waste:**

*Obligations*:

- Operators of industrial installations are under a special and enforceable obligation to reduce the production of waste if this is technically feasible and economically reasonable.
- They have to appoint an officer for waste matters.
- If a waste producer produces more than 2t of highly hazardous waste or more than 2000 t of hazardous waste he has to work out
  - a long term waste management concept every 5 years
  - a "waste budget" for any past year showing what and how much waste was produced and were it went
- waste producers and holders are entitled and also obliged to manage the recovery of waste. They can commission private partners or business assiciatios with this task.
- waste producers and holders are entitled to dispose their waste in their own facilities or facilities providesd by private partners or business associations. Otherwise they are obliged to hand the waste over to the communal service. They can be required to do so if the commune has built a disposal infrastructure and seeks to recover its

investment. This has caused industry to try to declare waste for disposal waste for recovery.

## III. Product Responsibility

The following is only concerned with problems caused by products which have become waste. I therefore do not touch upon product liability in the sense of liability for damage caused by wrongful products.<sup>1</sup>

The responsibility of the producer and possessor of waste as outlined above must be distinguished from the responsibility of the producer of the product. As importers and distributors of products are often made responsible besides producers it may be advisable to call the approach product responsibility rather than producer responsibility.

There are two reasons for making the product producer responsible:

- the possibility of prevention, recovery and safe disposal of waste largely depends on the design of the product. Hence the obligations concerning the design of the products
- the producer is the first mover in the chain which finally causes waste problems, and he benefits from the sale of the product. Hence the obligations concerning the taking back of the product.

For these reasons product responsibility is an application of the polluter pays (or causation) principle.

According to Arts. 22 - 24 of the German Act on Waste and the Closed Cycle Economy Government has very broad powers to issue Regulations on what the Act calls product responsibility. Government may regulate the design of the product, if this is necessary in order to

- facilitate recycling,
- prevent risks to human health and the environment, or
- reduce the volume of the waste.

In addition, Government may require producers and distributors to take end of life products back and ensure their recovery and disposal.

These provisions sound great but have been employed only very reluctantly. Still, Germany must be counted as comparatively active in this field. It has somewhat pioneered in the areas of packages and end of life vehicles but also blocked progress of EC legislation in some respect.

Germany has followed the EC approach which is to proceed along waste categories and tackle one category after the other, like, e.g. used oil, packages, end of life vehicles, waste electronic equipment, etc. Ms. Wallström has, in 2001, suggested to adopt a more comprehensive concept cross-cutting product categories. The German Council of Experts on Environmental Questions (SRU) has in its report of 2002 expressed itself somewhat reserved about this proposal. The Council fears that the tailor-made approach used in relation to different categories of waste may be given up for more general and

<sup>&</sup>lt;sup>1</sup> Germany has transposed the EC Directive on product liability. The requirements of proof of causation and the exemptions for state of the art and R&D defects have hindered the law to become significant.

less demanding measures. It suggests that more research is necessary on suitable instruments.

For the different product categories Germany has generally adopted a combined regulatory/self-regulatory approach rather than using economic instruments such as tradable recovery certificates as used in Britain. Normally, the German Regulations lay down individual basic obligations to take end of life products back and allow or even require producers and distributors to organise a collective system which frees them from individual obligations.

Regulations have been introduced for the following product categories:

- (1) **Waste Oil** (EC Directive 75/439; German Regulation of 1987)) Retailers of oil must take used oil back at no cost for the consumer. Consumers are obliged to deliver used oil at collection points. The collected oil shall be recovered if this is technically feasible and environmentally sound.
- (2) **Batteries and accumulators** (EC Directives 91/157, German Regulation of 2001) Batteries may not be brought on the market if exceeding certain thresholds for mercury.

Retailers must take spent batteries back at no cost for the consumer. Producers must take back batteries collected by retailers and recycle or dispose them. Consumers must return spent batteries at collection points.

Producers must organise a collective taking back system which is in charge of the collection, recovery and disposal. The system must submit a yearly report on its activities. Single producers may establish their individual take back system if this is as effective as the collective system.

(3) **Packages** (EC Directive 94/62; German Regulation of 1991, replaced 1998) According to both the EC Directive and the German Packaging Regulation transport packages must be taken back by producers and distributors of products and reused or recovered whenever this is technically feasible and economically tolerable. Distributors must take back sales packages from end-consumers. Producers must take back sales packages collected by distributors. Producers and distributors must reuse or recover the sales packages they have collected.

The EC Directive leaves it to the MS how to organise the collection and recovery. As noted before Germany did not adopt economic instruments but aims at collective self-organised patterns. According to the Packaging Regulation producers and distributors are freed from the duty to take sales packages back if they participate in a collective collection and recovery system. The system must be approved by the competent Land Ministry. It must prove that its service is geographically comprehensive and that it fulfils certain recycling quotas. These are: for glas: 75 %, tin cans: 70 %, aluminium: 60 %, paper: 70 %, compounds: 60 %, plastics: overall 60 %, material 36 %. The quotas are more ambitious than those fixed by the EC-Directive. More than the EC quotas the German quotas stress material recycling as compared with energy recovery. The Duales System Deutschland AG (Dual System Germany Inc.) was founded as the German major collective collection and recovery system (dual meaning that this private organisation sides with the public service in charge of other waste). As any collective system must cover the geographical area of at least one Land competition is widely

excluded by the Regulation. Therefore the Dual System enjoys a factual monopoly of offering the management of collection and recycling.

In its report of 2002 the SRU says that the Dual System although having fulfilled (with one exception) the envisaged recycling and recovery quotas did not contribute to preventing waste. The consumption of packages having gone down after 1991 from 15 million tons per year to 13 million has until 2000 remounted to the 1991 level (1991 being the date of introduction of the system).

One way to prevent package waste is to set up return systems for reusable packages such as reusable beverage containers (Mehrwegbehälter). The Packaging Regulation quite ambitiously sets the target at 72 % of containers of beverages to be reusable and and actually reused. The Dual System could have organised this but failed to meet the target. (For instance they do not offer a separate collection system for unbroken glas containers). Therefore a compulsory pledge system was recently introduced. This means that the customer has to pay a pledge for any beverage container purchased except so-called ecological containers (e.g. polyethylen sacks).

The SRU has also proposed that for small plastic packages (which are often dirty and of chemically diverse composition) it may be more efficient to incinerate them together with household-waste rather than to insist on its material recycling.

The SRU is also critical about the monopoly character of the Dual System alleging that the system may be economically inefficient. It discusses with sympathy the British approach although stressing the fact that the recovery and recycling quotas might not be as ambitious as they could be, and that some measure of non-compliance has apparently been observed in practice.

On the whole the SRU expresses itself in favour of a concept of a charge on packages the consumer would have to pay. This would primarily contribute to the prevention of waste.

#### (4) End of life vehicles (EC Directive 2000/53)

In Germany between 1,1 and 1,7 million vehicles are disposed per year. This is about 30 to 50 % of the overall number of end of life vehicles. The other 50 to 70 % are exported to countries which have weaker standards for vehicles or waste disposal. In 2000 78 to 82 % of the overall volume of collected vehicles was recovered.

According to the EC Directive producers are obliged to construct cars such that heavy metals are not used except for certain indispensable purposes such as batteries, that the parts of the vehicle can be reused or recovered, and that recycled parts are used for the construction of new cars. There are not yet provisions on reducing the use of PVC materials. Producers, retailers, the insurance and recycling industry shall establish systems for the cost-free taking back of used cars. The last holder of the car shall be obliged to deliver the car at a collection point. The MS shall take measures to ensure that 85 % of the average car weight shall be recycled by 2006, and 95 % by 2015. The EC Directive leaves it to the MS to choose the instruments of implementation.

Germany had set a recovery scheme into practice already earlier than the EC Directive. In 1998 a combination of a voluntary self-committment of the car manufacturing industry and a Governmental Regulation based on Arts. 23 and 24 of the Act on a

Closed Cycle Economy and Waste entered into force. The scheme was more ambitious than the later EC Directive with regard to the deadlines for the envisaged recovery targets but less so with regard to the use of heavy metals. The 1998 Regulation was replaced by a new Regulation of 2002.

The End of Life Vehicles Regulation introduces the principle that the costs of collection and recovery of vehicles must be borne by the producers. This is somewhat ironic because the German industry had lobbied against this very principle and persuaded the Council of Ministers to accept a compromise (i.e. Art. 4 para. 5 subpara. 2 of the Directive) which allows the MS to opt for a system which makes also the consumers pay, such as a sum to be paid at the time of the purchase of the car, or the collection of a charge together with the general tax on vehicles.

The Regulation adopts a self-regulatory approach with regard to the collection and treatment of the vehicles. It only demands that the recovery targets required by the Directive are met by industry, establishes certain standards for the running of collection points and treatment plants, and introduces a certification scheme for these plants based on certified independent experts. Industry can decide whether they establish a large and comprehensive organisation in line with the Dual System for packages, or to go decentralised. They have taken the second route, building on the approach already developed since 1998.

One weakness of the system identified by the SRU is that the deregistration of an end of life vehicle is not well coordinated with the delivery of the vehicle at the collection point. A vehicle can be deregistered without actual proof that its life has really ended. This enables car owners to sell the car for export and yet declare it properly delivered.

Given the fact that Germany had reached a recovery rate of about 80 % already in 2000 the SRU has suggested that the time scale set by the Directive should be abbreviated in Germany.

# (5) Waste from Electrical and Electronic Equipment (WEEE) (EC Directive 2002/96)

In Germany about 900 million electronic or electrical devices are in use. About 2,1 million must be disposed every year.

Restrictions concerning the use of certain hazardous substances in EEE are laid down in a separate Directive, EC Directive 2002/95. The collection and treatment of WEEE is regulated by EC Directive 2002/96,

Directive 2002/96 asks the MS to encourage a product design which facilitates dismantling and recovery of WEEE. The MS must ensure that WEEE are collected free of charge for the final holder by the distributor or producer. Producers (including importers) must ensure that the collected WEEE are treated according to certain environmental protection standards, and that certain reuse and recovery targets are met. They can do this either individually or by means of a collective system. The costs of collection and treatment must be borne by the producers, except for equipment used by persons other than households before 13/8/2005 (historical waste) for which costs may be allocated also to other persons except private households.

The German Government has in April 2003 published key points on the future WEEE Regulation. The Regulation shall first of all transpose the restrictions concerning the use of dangerous substances as required by EC Directive 2002/95. As for the collection of WEEE it is envisaged that the local authorities (or their public waste management companies) shall collect WEEE together with the regular waste collection service and separate them out and place the different categories of WEEE into a specified number of containers. This service must be financed by the local authorities. Besides this the distributors can take WEEE back and place them into the local authorities' containers. (I am not sure if this financing scheme is compatible with the provisions of the EC Directive).

A Coordination Service set up and financed by the producers ensures that the WEEE collected in the containers are transported to the treatment facilities. The producers are responsible to ensure their treatment according to certain environmental standards and recovery targets as specified by the Directive. They can do this individually or through a collective system. A Clearing House will be set up which supervises the functioning of the treatment. Each producer must register with the Clearing House. With the registration data on the equipment placed on the market and information about the participation in a collective or individual treatment system must be submitted. The Clearing House checks if the information is correct. It has however not the power to order producers to act or desist from some action. This power is reserved to the public authorities of the Laender. The Clearing House is a company under private law and financed by the producers. It is supervised by the federal government.

#### Conclusion:

More incentives to prevent waste

More regulation of product design (e.g. plastic compound). But: how shall importers be treated?