Report Belgium

1 Status Quo on reuse packaging
   1.1 Products in reuse packaging
      1.1.1 Remarks about the overview
   1.2 Market share of reuse and one way packaging
      1.2.1 Beer
      1.2.2 Soft drinks and water
      1.2.3 Milk/dairy products
      1.2.4 Wine and other products
   1.4 Former reuse packaging

2 Distribution and Redistribution
   2.1 Markets and distribution channels
   2.2 Redistribution to the fillers

3 Pool organisations and numbers of circulations

4 Legal basis concerning reuse packaging for beverages
   4.1 Environmental tax law (Milieutaksbew) and memo of understanding
   4.2 Consequences of the arrangements reuse packaging

5 Obstacles and support for reuse packaging
   5.1 Beverage packaging
   5.2 Obstacles in the market

List of contacts

Literatur

The research in Belgium was carried out by: Ronald Jansen, PMA, Nijmegen, NL
1 Status Quo on reuse packaging

1.1 Products in reuse packaging

Reuse share >50%
- Beer
  draught, glass bottle

Reuse share >20%
- Soft drinks
  Glass bottle, (very little REF-PET-bottles)
- Mineral-, spring-, soda water
  Glass bottle, (very little REF-PET-bottles)

Reuse share <10%
- Milk and diary products
  Glass bottle, jars with screw cap
- Wine
  Glass bottle,
  Refill in retail stores
- Fruit juices
  Glass bottle
- Washing agents and detergents
  Plastic bottles for refill retail stores

1.1.1 Remarks about the overview
1. The different volumes of reuse packaging (sizes, forms) were not examined in detail. Within beer, the soft drinks and water the variety of shapes is the largest.

2. REF-PET hardly occurs for soft drinks and waters. In some cases campaigns for the introduction the 1.5-l-REF-PET-bottle were run, e.g. from the retailer chain Colruyt. On the one hand, this introduction failed because of the small interest of the Belgian consumers said Colruyt - even the prices were relatively low- which have been steered by Colruyt with its 'private label' to competitive level. On the other hand, Colruyt states that the competition against highly promoted recycling / collection schemes is a hard burden for reuse packaging.

3. The 1-l-polycarbonate bottle for milk and diary products was not able to take foot in Belgium. As reuse packaging on the Belgian market there exists only a very old-fashioned bottle with crown cork finish for sterilised milk.

4. In Belgium there are several big supermarket chains (e.g. Colruyt, Delhaise) that successfully distribute wines in reuse glass bottles.
5 Fruit juices, washing agents and detergents are offered predominant in the in green shops in reuse packaging. For fruit juices this is restricted to very small producers with an limited regional distribution (e.g. FREYA) with a - nationally seen - predominant market share. 
There is further the possibility in a part of the green shops to refill packages for liquid washing agents and detergents by self service (1-litre bottles for e.a. Ecover-products). Reuse packaging is restricted even for other products in green e.g. diary products, yoghurt, lemonade syrup etc.

1.2 Market share of reuse and one way packaging

In this chapter are annotated the statistical figures of reuse/one way packaging for beverages. The found statistical data are in general limited (in part not available or secret). It is above all the producers and the retailers of soft drinks and water who keep figures out of public discussion. According to verbal information of the Kominklijk Verbond van de Industrie in Water en Frisdranken they even do not get statistical information from their members (5).

1.2.1 Beer

The sales of returnable bottles is rather stable with beer. On the other hand (cans) show a tendency of increase, pending of a decrease of the non-returnable glass bottles. As reasons for that the intensive commercials in Belgian television are called for.

1.2.2 Soft drinks and water

The Belgian secret about the reuse shares hardly can be lifted. The older data of UNESDA (see table Belgium 2 and Belgium 2 in appendix II) only be related to actual estimations of interview partners (5):

<table>
<thead>
<tr>
<th>Soft drinks:</th>
<th>30% reuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water:</td>
<td>40% reuse</td>
</tr>
</tbody>
</table>

These rough figures would state a more or less stand still of the decline within reuse for soft drinks, where UNESDA figures show a reuse share of 28,7% in 1994.

The same decline has to be stated for reuse packaging in the field of bottled water. Latest UNESEM figures show a market share of 23,2 % in 1995 coming down from 51% in 1984. The estimated 40% therefor may not be realistic, even reuse quota seems not to decline anymore.

The increasing share of one way packaging within the last decade is, according to opinion of the industry association and opinion of the Nationaal Verbond der handelaars in bieren en drinkwaters hardly influenced through the import mainly from France that uses almost exclusively one way for the CO2-containing water (11).

A older confidential (not finalised) study, carried out from the Belgian Verpakkingstituut (1). 1994 seems to be interesting. From this study (which was not allowed to be copied -
remark by the author) the data in Table B-1 ,"Non-alcoholic beverages in the Belgian
districts - shares of one way and reuse packaging are taken out of.
Among others, data are based on Nielsen market research data.

Tabelle B-1 Reuse Shares for Soft Drinks and Water

<table>
<thead>
<tr>
<th></th>
<th>Brussels</th>
<th></th>
<th>Flandern</th>
<th></th>
<th>Wallony</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>A</td>
<td>B</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Glass one-way</td>
<td>6.29</td>
<td>5.65</td>
<td>3.70</td>
<td>3.06</td>
<td>4.24</td>
<td>3.80</td>
</tr>
<tr>
<td>Metal</td>
<td>18.91</td>
<td>17.95</td>
<td>10.86</td>
<td>9.93</td>
<td>14.07</td>
<td>12.86</td>
</tr>
<tr>
<td>Plastic one-way</td>
<td>32.66</td>
<td>32.69</td>
<td>20.55</td>
<td>19.90</td>
<td>34.83</td>
<td>34.15</td>
</tr>
<tr>
<td>bev. cartons</td>
<td>10.16</td>
<td>9.95</td>
<td>5.63</td>
<td>5.09</td>
<td>10.33</td>
<td>10.31</td>
</tr>
<tr>
<td>Glass reuse</td>
<td>31.99</td>
<td>33.75</td>
<td>59.26</td>
<td>62.02</td>
<td>36.53</td>
<td>38.89</td>
</tr>
</tbody>
</table>

Non alcoholic beverages = Lemonades, Water (flat + carbonised), Fruit and Vegetable Juices, Sirups

A = Periode February 1992 - January 1993
B = Periode before (91/92)

The following conclusions can be drawn from this study:
- There was a clear overweight for reuse packaging in Flanders in the mentioned
  period, while the reuse quota in Wallonie and Bruxelles 32 and 39% was much
  lower.
- Reuse glass bottles still declined in all districts;
- The winner of these changes in market structure were cans.
- The reasons for this regional disparity within Belgium may be that the southern part
  of Belgium widely is influenced by import (one-way) from France, while in the
  eastern and northern part of Belgium imports from Holland and Germany (mainly
  reuse) play an important role (see report Germany).

1.2.3 Milk/ diary products
Data included in Table B-2 go back to a study called „Milk and diary products originate
from verbal and written information of the Belgian Confederatie van de Zuivelindustrie (4).
The source of data published by this association is a study of Tetra Pak, which Tetra Pak
did not make available to the author on request.

Table B-2: Reuse Shares for Milk and Milk Products

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>1995</th>
<th>1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steriliset Milk</td>
<td>18%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Pasteurised Milk (inclusive bulk)</td>
<td>29%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Milk total (sterilised, pasteurised, inclusive UHT und bulk)</td>
<td>10%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Buttermilk</td>
<td>24%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Chokolad milk</td>
<td>-</td>
<td>-</td>
<td>6% (estimated)</td>
</tr>
<tr>
<td>Joghurts usw.</td>
<td>-</td>
<td>-</td>
<td>&lt;10% (estimated)</td>
</tr>
<tr>
<td>Coffe milk, -creame</td>
<td>-</td>
<td>-</td>
<td>&lt;10% (estimated)</td>
</tr>
</tbody>
</table>
The mean trends and information of that table are:

- There are specific reuse systems for sterilised milk and buttermilk as well as for fresh milk.
- The market share of the reuse systems declined in the last decade, while the reuse systems for pasteurised milk had to realise the most hardest reductions. Sterilised milk and buttermilk managed to keep a certain market share of around 12/13%.
- The market share of UHT-milk has not become so dominant like in the neighbour countries Germany, Holland and France.
- The total market share of milk in reuse packaging has become marginal with about 6% share in total even reuse systems are available for most milk products.

About five years ago, it was attempted to support the sales of milk in reuse packaging (glass bottle). These promotion actions were not able to stop the negative trend. It is the expectation of the association that reuse systems will get stable in the next few years on a low level. It is not intend to stop or remove filling in reuse packaging. Therefore the pressure from environmental groups is too strong. The introduction of the new PC-reuse bottle (cf. the situation in Holland) was considered but not carried out. The positive market effect was doubted (4).

1.2.4 Wine and other products
In the case of wine and all other product no more precise qualitative data were not made available because of missing statistical data or confidentiality. Probable reuse share for wine is the highest because there are several big retailer chains and specialised wine and spirit shops acting in that field. Reuse rate for wine never the less seems to be under 10%.
From a study of VITO (1994) carried out for Colruyt, it turned out that the ecological and economic advantages for reuse packaging are relatively favourable for wine compared to other beverages.
The transportation distance plays a big role within the trade of wine: Already from 200 kms, the bottling i.e. in the producer region is no more to be accounted for ecological reasons. Wines therefor are bottled in Belgium by Colruyt in two standard bottles (Bordeaux and Burgundian type). Colruyt offers wine in reuse in different price ranges.

Above all market share of reuse packaging for soft drinks and the decreased in recent years. One way PET comes here in place of recoverable glass.

The traditionally strong reuse system for beer, faces a 'stand still'. One way glass is exchanged by cans. It is unclear whether this tendency will affect the reusable bottles in the coming years.

A stabilisation of the old reuse glass bottle for milk and diary products on a relatively low level (5-10%) can be stated, following strong decline rates within the last ten years. Although one did not readjust on Polycarbonate- bottles.
Wine is the only product line in Belgium where reuse was in recent years introduced again. The adaptation to reuse while domestic fillings of bulk wine is successful at some supermarket chains. The current reuse share is not confessed.

1.4 Former reuse packaging
In the 50ies and 60ies, a much greater number of food was supplied in reuse packaging, e.g. (10):

- Jam: small glass jars, deposit 1.5 BF
  big glass jars, deposit 3 BF
- Herring: Preserving jars, deposit 5 BF
- Oil: Glass bottles
- Vinegar: Glass bottles

2. Distribution and Redistribution

2.1 Markets and distribution channels
All mentioned reuse packaging are offered all over the country. Some differences between the 'districts' in the reuse rates of beverages have been discussed in 1.3.2. Statistical data for the different channels of distributions were not available.

2.2 Redistribution to the fillers
A abstract of redistribution logistics for beverages (10):

1. Retake in retail outlets mainly personnel or by retake machines;
2. the packages are collected in a sorted manner;
3. the packages are redistributed by the same operation vice versa to distribution.

A small regional initiative located in Brugge „kringloopwinkel“ is active in a special retake and sorting business for used bottles. The company sorts one way glass bottles (bottles for wine, fruit juices and other beverages) from glass containers and collection bins at HoReCa and returns them again to the producers to reuse (6).

3. Pool organisations and numbers of circulations

According to information of FEDIS and the ministry of economy there exist no pool organisations in Belgium for reuse primary packaging (2, 10). No pool organisations and no pool agreements were in fact encountered during the research in the different sectors. There is no particular managing organisation even where standard bottles (e.g. beer and milk) are used.

Numbers of circulations are by some sources. Mostly average numbers of circulation are published. It could not be clarified how these numbers of circulations were calculated.
Beer and alcoholic beverages
Glass bottles for beer in most cases 25cl, 33cl, and 100cl circulate 40-60 times. Individual company brand bottles circulate about 20 times (3).

Soft drinks and waters
For non alcoholic beverages, in general lemonade and water containing CO2, fruit and vegetable juices and syrup (7), the following data have been published:
- Number of circulations per year: 4;
- Durability: 8 years;
- Total number of circulations: 32

Milk and diary products
There are two kinds 1-l-glass-bottles, which differ slightly in shape, therefor they must be sorted separately. The estimated number of circulations is 15-25 (4).

Wine
Glass bottle, 0,75 and 1 litre.
The number of circulations is estimated with 4 (see as well Report Holland) As reason for that low number of circulations sources stated the long circulation term for wine bottles which are stored at private consumers (8).

4 Legal basis concerning reuse packaging for beverages

4.1 Environmental tax law (Milieutakswet) and memo of understanding
The environment tax law (Milieutakswet) was passed on July 16th, 1993 and foresees the application of environmental taxes on several categories of products/packaging, including beverage packaging (see IVCIE and Landmann, Ute S. 96/97).

On March 5th, 1997, co-operation agreement was set into force which has the character of a law in the three Belgium Regions. The agreement concerns packaging waste of domestic and industrial origin. In the frame of that agreement the responsible person is every person who packs/fills or which can orders packing or who is deciding on how a product is packed. For control of compliance with the agreement the „Inter regional packaging commission“ (IVCIE) is responsible.
There are three essential obligations:
- Set up of a prevention plan;
- Compulsory retake, attaining the recycling rates;
- Information duty.
The agreement is to be considered to be the Belgian conversion of the EU Packaging directive 94/62/EG.

4.2 Consequences of the arrangements reuse packaging
The positive influence of the eco-taxes, like some authors stated (xxx), can not confirmed for reuse packaging. The law did not bring a positive impulse for the benefit of these reuse systems like the declining reuse rates impressively show.
Certain interview partners react amusingly on the question about the effects of the eco-tax-law on reuse packaging (7,8,9,11). The law is above all considered to be 'paper' which showed no effect because of the diverse possibilities of release. This is also confirmed by the missing tax yields (2, 7).

Exemptions from eco-tax result very easily if within the packaging agreement the recovery target may be achieved (for a transitional period in 1996-2000, see brochure IVCIE),

- Targets for the material recycling and incineration are determined clearly within the agreement, however no quotas for reuse packages are laid down in the agreement.

- Producers and market orient themselves correspondingly onto the recycling rates. This very easily is achieved by signing a contract with a dual system organisation. In Belgium for the primary packaging this is VoG FOST PLUS.

- Person responsible for packaging have the obligation of the IVCIE to make its dates of packing available, including data about the distribution one way and reuse packaging. On request to IVCIE stated, that no data for reuse packaging have been made available until November 1998. (1). This also corresponds to the experiences during research for this study.

In practice, it the eco-tax-law seems hardly to be in force anymore and be undermined by the packaging agreement. This research yielded no legal action in Belgium which supports reuse packaging

5 Obstacles and support for reuse packaging

5.1. Beverage packaging
The general trend away from reuse is above all influenced by two developments:

1. As in Holland, industry and market perform pressure to beverage fillers in Belgium. However, there are differences to the situation in Holland:

a In Belgium, the part of independent retailers is still much greater. In 1997 their market share was remarkable 62,2% (see Jaarverslag Fedis). Therefore the influence of the big retailers on the packaging policy is to be seen much smaller. The reasons for that sales structure may be the different housing structure with many more corner shops .

b In rural areas the home service (beer, soft drink, water), direct delivery of food to private households, and mobile shops are still is a matter of fact - although regressive. In these sales structures reuse systems are a integrated inalienable factor.
2. Similar to Holland the role of the Belgian state changed between introduction of the Milieutakswet (1993) and that 'decree of the permission co-operation agreement concerning recovery of packaging waste (1997). At the beginning the strategy existed to place a disadvantage on one way systems by introduction of eco-taxes. The strategy now is to formally keep the part of refillable packages while strongly supporting material retake and recovery.

5.2 Obstacles in the market

5.2.1 Small flexibility of reuse systems
A central barrier is the old fashioned standard of reuse packaging and the little flexibility of non organised fillers to modernise the reuse system.

An example is the relatively strong decline of the old-fashioned reuse milk bottle. This old-fashioned bottle hardly satisfies the wishes of the modern customer. The loss in taste during sterilisation compared to the much less the irritation of taste in the UHT process (beverage carton) are one reason for that.
- Schools in Belgium get a subsidy of the EU for school milk. More than one quarter of the Flemish schools therefor have chooses for returnable bottles (sterilised milk mainly). However, the sterilised milk does not fall within these subsidy regulations as for pasteurised milk and UHT milk the subsidy of 3 BF is paid.

From a technical stand point of view this disadvantage of the glass bottle does not exist anymore, as cold sterile filling technology is available for glass bottles today. This change in technique is a problem, as long as the modifications within the packaging pool can not be ruled by a common pool organisation.

5.2.2 Technical obstacles
The sorting into two REF-PET bottle types for soft drinks and water because of the aromatic infection problems is namly called as problem by the retailers and the fillers.
List of contacts:

1 - Herr de Boeck, R., IVCIE
   Interregionale Verpakkingscommissie, Kunstlaan 10-11, 1210 Brüssel, Tel.
   0032/2/2090360. Mündliche und schriftliche Information, 24-10-1998

2 - Herr Dewulf, D., Ministerie van Economische Zaken, Bestuur kwaliteit en Veiligheid,
   Afdeling Concurrentievermogen, Emile Jacqmainlaan 154, 1000 Brüssel, Tel.
   0032/2/2064111. Dewulf ist Sekretär der 'Opvolgingscommissie betreffende die
   milieutaken'. Mehrere telefonische Unterhaltungen, September-Oktober 1998

3 - Herr Keersemaekers, J., Corsendonk Bier, Steenweg op Mol 118, B-2360 Oud
   Turnhout, personal Information, 5-11-1998

4 - Herr Kestens, H., BCZ - Belgische Confederatie van de Zuivelindustrie,
   Minderbroederstraat 8, 3000 Leuven, Tel. 0032/16/242113. Telefonische und
   schriftliche Information, 23-10-1998

5 - Frau Laber, ...Koninklijk Verbond van de Industrie in Waters en Frisdranken, Brüssel,
   Tel. 0032/2/6491286. Telefonische Information, 4-11-1998

6 - Herr Lenders, P., Koepelorganisatie Kringloopwinkels, Telefonische Information, 5-11-
   1998

7 - Frau van Looy, E., Belgisch Verpakkingsinstituut, Picardstraat 15, 1000 Brüssel, Tel.
   0032/2/4272583. Besuch beim Institut, 14-10-1998

8 - Herr de Maarschalk, C., Colruyt, Brüssel, Tel. 0032/2/3601040. Mündliche Information,
   5-11-1998

9 - Herr Martens, B., Bond Beter leefmilieu Vlaanderen vzw, Tweekerkenstraat 47, B-1000
   Brüssel, Tel. 0032/2/2821720. Mehrere telefonische Unterhaltungen, September-
   November 1998

10 - Herr Verhaeghe, A., FEDIS, Belgische Federatie van Distributieondernemingen
   (FEDIS), Sint-Bernardusstraat 60 1060 Brussel, Tel. 0032/2/5373060. Schriftliche
   Information (via D. Dewulf), 13-10-1998

11 - Herr van Waesberge, D. Nationaal Verbond der handelaars in bieren en drinkwaters
   (NVHBD), Steenweg op Mol 118, 1080 Brussel, Tel. 0032/24103347. Telefonische
   Information, 4-11-1998
Literatur:

* Belgische Confederatie van de Zuivelindustrie,

* Belgisch Verpakkingsinstituut

* Belgisch Verpakkingsinstituut, Übersicht belgischer und europäischer Gesetzestexte (Konzept, 1998)

* Belgisch Staatsblad, Dekret zur Genehmigung .... 16/1/1997

* FEDIS, Jaarverslag 1997, Tabelle 8: Relatieve aandelen van de distributievormen

* Interregionale Verpakkingscommissie (IVCIE), Brochure: Alles was Sie wissen müssen um Ihnren gesetzlichen Verpflichtungen nachzukommen.

* Interregionale Verpakkingscommissie (IVCIE), Richtlinien für Unternehmer zum Ausfüllen der Formulare der IVCIE


* Fost Plus tarieven: Terugnameplicht van verpakkingen trad in voege/, Pack News, 4/97


* Vergelijkende levenscyclusanalyse van verpakkingen alternativen voor wijn, Mol, 1994

