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06/2011

Evaluation of the Packaging Ordinance

Summary

ENVIRONMENTAL RESEARCH OF THE
FEDERAL MINISTRY OF THE ENVIRONMENT,
NATURE CONSERVATION AND NUCLEAR SAFETY

Project No. (FKZ) 3708 93 303
Report No. (UBA-FB) 001460

Evaluation of the Packaging Ordinance Summary

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UMWELTBUNDESAMT

This publication is only available online. It can be downloaded from <http://www.uba.de/uba-info-medien-e/4072.html> along with the complete version, an annex and a German-language summary.

The contents of this publication do not necessarily reflect the official opinions.

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Edited by: Section III 1.2 Product Responsibility, Implementation
of the Electrical and Electronic Equipment Act and the
Batteries Act
Gerhard Kotschik

Dessau-Roßlau, February 2011

Abstract

Note: The English version of the abstract comprises the most essential facts of the German version. Some subordinate aspects of the evaluation of the Packaging Ordinance and of alternative conceptual variants for the future disposal of packaging and comparable (in terms of material, here briefly “comparable”) non-packaging waste were intentionally left out in the English abstract.

Initiative and assignment

Since the introduction of the Packaging Ordinance in 1991 its regulation contents and their interpretation have nearly continuously been subject to discussions within expert groups. In the meantime, issues and priorities have changed in the discussion. Whereas initially the aspects ecology (keyword: recycling rate), microeconomic cost efficiency (keywords: monopoly prices, free rider problem) and the economical cost-benefit ratio (keyword: life cycle assessment) had been in the focus of the controversies, more recently, the main focus is now particularly on the competitive and distribution effects of the Packaging Ordinance. Reform options are seen in certain system adaptations or, however, also in a fundamental system change.

In the course of the 5th amendment of the Packaging Ordinance different sides demanded a fundamental examination and advancement of the Packaging Ordinance. The Federal Council of Germany adopted a resolution that asks the Federal Government to start thinking about an evaluation of the implications of the amendment and a business game to analyse the possibilities of a fundamental revision of the packaging order as well.

Of very great importance for bifa's evaluation has been the identification and analysis of those data sources which illustrate the scientific state of the issues to be dealt with. The analysis covers primary and secondary sources preferably of very high actuality (cf. final report). Another source of information used for the evaluation were the questionnaires that had been answered by stakeholders affected by the Packaging Ordinance.

nance, as well as interviews with selected stakeholders and other experts on specific issues.

Stakeholder interviews

Essential criteria in selecting the stakeholders were, in the area of the producing industry, the packaging intensity of the products. In trade and other businesses the publication of studies and statements regarding the packaging disposal or also the circumstances that a stakeholder plays a weight-bearing role in the organisation and realisation of the packaging disposal, were decisively. Moreover environmental organisations and consumer protection organisations were included in the survey.

The content of the survey is based on the central problem definitions of this research project: the general assessment of the Packaging Ordinance and the disposal of packaging waste, the effects of the 5th amendment of the Packaging Ordinance as well as the optimisation of future packaging disposal.

Based on the 100 contacted stakeholders a response rate of 71 percent resulted. In comparison to other sociological investigations this value is very high, fortunately.

Effect analysis of the Packaging Ordinance

The analysis and evaluation of the effectiveness of environmental policy instruments and the degree of achievement of single environmental policy instruments or general political requirements are based on relevant criteria and influencing factors. Both in ex-post evaluations and ex-ante assessments the criteria of „environmental achievement“, „economic efficiency“, „distributional effects“, "administrative practicality" and "political enforceability" are usually reverted to. Another aspect which is often highlighted in separate expert opinions is the "legal compliance" of an environmental policy instrument.

Following this idea, in the present expertise we explain and evaluate the effects of the current regulations in the Packaging Ordinance from a perspective that takes into account environmental, economic and social effects alike. In consideration of the central objective of the 5th amendment of the Packaging Ordinance to guarantee a „fair competition“ in the residential waste collection the evaluation criterion „fairness towards the

partners“, i.e. the competitive effects, obtains an outstanding meaning. The most important results of the effect analysis of the Packaging Ordinance focusing especially on the 5th amendment can be summarised as follows.

Ecological effectiveness

The economical growth since the implementation of the Packaging Ordinance in Germany in 1991 did not lead to an analogous increase of the amount of packaging. The consumption of quoted packaging has even clearly decoupled itself from the economic growth. However, the level of waste avoidance, in particular triggered by the Packaging Ordinance, can not be concretised, because the packaging consumption depends on a huge number of parameters. The respective influence of each of these parameters cannot sufficiently be quantified.

After the implementation of the Packaging Ordinance the actual recycling rates of all packaging materials increased. The effectiveness of existing recycling structures for glass, paper and carton has been improved and recycling structures were created for the recycling of lightweight packaging. The recycling of packaging waste from paper and carton, glass and other materials leads to environmental benefits by substituting primary resources. The thermal treatment of plastic packaging in a waste incineration plant – even for small-scale plastic packaging – still, from an ecological point of view (especially against the background of a continuous advancement of recycling technologies) does not equal material recycling.

According to its objective the 5th amendment of the Packaging Ordinance has influenced the ecological effectiveness of the Packaging Ordinance only slightly.

Economic efficiency

In our opinion the efficiency issue within the scope of the 5th amendment of the Packaging Ordinance positions itself particularly in the context of a destructive tendency in the competition. Evidence for this is a still high under-licensing as well as license dumping, which is supported by an increasing vertical integration of the dual systems (particularly in industry specific disposal solutions, but also in activities in all other areas of the disposal market).

A destructive competition bears the danger of monopoly-like structures (a narrow oligopoly or area monopolies) with suitable efficiency deficits (competition-limiting agreements, excessive cost or prices) dominating the market one day. However, it is difficult to identify, whether the demonstrated market or system development is exclusively owed to the basic conditions of the 5th amendment of the Packaging Ordinance or rather has to be assigned to higher market phenomena (keyword: general concentration trends) and interventions of the cartel authorities.

Explicit efficiency interferences from the renewed regulations (but maintained regulations as well) within the Packaging Ordinance can result from the fractioning of the separated markets (sales/transport/outer packaging) in the context of differentiated take back/recycling/disposal requirements and disposal paths (wherein here, nevertheless, possible specialisation effects and efficiency profits can counteract or other inefficiencies of an otherwise expanding licensing can be avoided) and from failing cost reduction effects due to the prohibition of licensing by trading companies. Reduced competitive pressure leads to excessive cost or prices (or even to anti-competition behaviour – keyword: ruinous competition in the residential collection of sales packaging), and thereby diminishes the efficiency. Besides, possible scale effects of more diversified business models (benefits in synergy and economies of scale). can not or only to a limited degree be realised. It should also be noted that the mentioned indications are drawn from a market and competitive theoretical point of view and therefore seem to be plausible. Nevertheless, an empirical foundation cannot succeed in all cases, particularly as the "market test" of the Packaging Ordinance in the version of the 5th amendment is not yet complete.

Other aspects of efficiency, i.e. cost reduction potentials, which were identified in the past as being of significance for the company Duales System Deutschland (DSD) – „grey expenses“ in particular by false throws, improvable recycling revenues particularly in the LVP disposal – appear as of subordinate relevance in this context. Meanwhile an important aspect (at least felt so by a few of the interviewed stakeholders) is the level of bureaucracy for the system operators, which is necessary for the implementation of the regulatory framework of the Packaging Ordinance. Nevertheless, in our opinion, it is needed to question whether the felt additional expenses are caused by a "regulatory overkill" of the 5th amendment of the Packaging Ordinance or rather are consequence of closing implementation deficits of the past.

Fairness to the parties (in particular competitive impacts)

(1) Functionality and impacts of the separation model:

The so-called "separation model" (i.e. "clear" distinction of commercial and residential packaging waste) is a key component in the attempts to increase the coverage of packaging being licensed with the operators of dual systems. Thus, the progressive erosion of the dual systems by dubious self-management solutions could be stopped for the first. However, this success has to be qualified by the possibility for industry specific disposal solutions - c.f. also point (2). In bifa's point of view it should be considered whether there should be a clear distinction between residential and commercial waste generation. In this case the so-called "equivalent waste producers" (acc. to § 3 (11), sentences 2 and 3 of the Packaging Ordinance) would become to what they actually are: commercial waste producers. This seems possible in view of the increasing diversification of the operating authorities of dual systems to suppliers of complete waste management solutions and the opening of the residential collection for comparable non-packaging (and the thereby expected increase in the amounts of waste for recycling), like it is already intended in the Packaging Ordinance, without taking away the amounts from one of both subsystems in existence-threatening scale. However, it would be important in this case that an unequivocal regulation is found for catering business, filling stations and similar waste generations that combine inside and outside consumption. To a not unimportant extent this packaging remains in the public space or in the residential collection. A definite assignment of the complete packaging amounts to either the commercial or the private area would always lead to a one-sided burden of the other area not covered by payments for disposal services. A basis for a realistic division (inside/outside) could be the expert report foreseen by the communication no. 37 of the federation/Länder waste consortium (LAGA), which already has been introduced in the disposal of packaging waste; but one has to bear in mind that bifa's recommendations concerning the required increase in the quality of the expert reports should be considered.

(2) Functionality and impacts of industry specific disposal solutions and company run take-back solutions

At the time being, from the perspective of bifa, it is still too early to assess the impact of the so-called "industry specific solutions" clearly. Nevertheless it is becoming clear that

their implementation into the practice could not of withdrawing amounts from the household registration could not close completely, which amounts to a considerable extent, however, go to companies that operate a dual system. The total amount of sales packaging registered with industry specific disposal solutions and licensed with dual systems was in 2009 at a significantly higher level than before the 5th amendment of the Packaging Ordinance. A consistent implementation of the separation model, as it was originally proposed by the Federal Ministry for the Environment would have avoided a lot of control effort to the Länder (which during the amendment process pleaded strongly in favour of permission of industry specific disposal solutions).

For the purpose of stabilizing the household registration should comply with the requirements of the LAGA by all actors (especially accountants and other auditors) have to be more carefully examined. The legislative bodies should consider alternatively take into account a regulation according to which the collection points (specifically, the packaging collected at certain waste producers) have to decide between participating at an industry specific solution and making 'participation payments' to a dual system. Regardless of this a strict distinction between private and commercial consumers, and thus abolishing the equivalent waste producers and thus the industry specific solutions should be considered. If one wants to keep with the basic concept of industry specific solutions, a permission requirement for new and even existing solutions should be taken into consideration.

(3) Functionality and impacts of the obligation to deposit a declaration of completeness:

The obligation to deposit a declaration of completeness ("VE") turns out to be successful from the perspective of bifa so far. The degree of sales packaging for which 'participation payments' are made to the dual systems or which are registered at industry specific solutions increased to slightly above 75% in 2009 (from about 67% in 2008 and 70% in 2007). Looking at the 2010 quarter IV plan values that are reported by the dual systems to the so-called "Gemeinsame Stelle" (an coordination body formed by all of the nine dual systems currently operating in Germany), doubts arise as to whether the high 2009 level will be held in 2010.

To achieve stabilization at a high level degree of licensing, in the opinion of bifa a standardization of VE tests (§ 10 para 1 Ordinance) is required. The requirements of the LAGA Release No. 37 on the declaration of completeness, the expert review and the

audit report as well as the certificate are just as the examination notice PH 9.950.3 issued by the Institute of Certified Public Accountants (IDW) important steps in this direction. Their implementation in practice should be observed critically of the law enforcement bodies.

More problems are resulting from the option in § 11 of the Ordinance, under which the obligations of the Ordinance may be transferred on an authorized third party (using the "authorization model"). Dual systems and provider of industry specific solutions, but also so-called "license mediators" in this way obtain an even greater play ground what bears the danger of reduced amounts of sales packaging being reported to the "Gemeinsame Stelle". On this basis, pricing models are said to be possible that even more pressurize the licensing market regardless of the service quality and meeting of standards.

(4) Functionality and impact of the "Gemeinsame Stelle"

There is no indication on how contracts for disposal of sales packaging could be awarded through the Gemeinsame Stelle in a way that is reasonable in terms of competition policy and meeting the expectations of the local authorities and the waste management companies as well.

In relation to this issue, we strongly recommend a change to the previous regime. The range of possibilities reaches from unbundling of system operators from operative waste management companies (keyword "legal unbundling") over the coordination and monitoring of tenders (calls) by an independent and neutral body to awarding of contracts completely by the local authorities themselves. An absolutely smooth cooperation between competitors (i.e. the dual systems) under regulatory constraints seems not to be possible at all.

Administrative practicality

Positive is the finding that the current effort related to the enforcement of the Ordinance in the opinion of bifa is appropriate in view of the various control and monitoring tasks. Demands of parts of the economy as well as environmental and consumer protection groups for an even more consistent enforcement would, in the end, mean an increase of authorities' duties and thus of public expenditures. But as long as the private sector

does not establish a functioning system that allows a self-governing of the tasks that can be taken over by its actors themselves, it would be very difficult to find acceptance within the population for having more staff being provided and trained on the public funds' expenses. Most of the tasks would be suitable to be taken over by a functioning self-management system of the private sector.

Very critical, however bifa classifies the responsibility of province or district authorities (depending on state) for the enforcement of the environmental legislation and especially for the control of the declarations of completeness. Environmental authorities are often overstrained with the complexity of the controls and the flow of goods and packaging. It is hardly possible to guarantee a nationwide uniform approach on the enforcement level. As a concrete opportunity to combine the enforcement tasks for the purpose of increasing efficiency, establishing uniform standards and sharing the financial burden equally bifa recommends to set up an institution that receives sovereign power from the Federal Government for executing clearly defined tasks.

Solution attempts to the development of the packaging disposal

In correspondence with the analysis and evaluation of the Packaging Ordinance bifa had to analyse by which measures the detected deficits could be resolved or certain modes of action could be optimised.

For a development of the Packaging Ordinance various approaches have been suggested by the scientific community and the stakeholders concerned. Indeed, none of these "alternatives" are formulated and valuable enough to be suggested as an immediately usual solution variation. As the bifa stakeholder survey has shown off there are quite different ideas, between and within the stakeholder groups, about how the future packaging disposal should be designed.

The so-called „discussion paper of associations“, the "Remondis model" and the "VKS model" that are seen to represent more comprehensive approaches. Besides, the aspect of an enlarged collection of valuable materials according to the draft of an Act for Promoting Closed Substance Cycle ("Kreislaufwirtschaftsgesetz") is of significance for a huge number of stakeholders. In order to create a certain range in the elaboration of alternatives also a „enlarged voluntary self-obligation“ of the dual systems and "packag-

ing certificates" based on the British "Packaging Recovery Notes (PRN)-System" are taken into account.

Concept model „Advancing a proven system“

This concept considers the current Packaging Ordinance and its practical implementation to be a compromise solution that has matured over the years and now should be adapted to changed conditions. In accordance with bifa's ideas the mainstays of the Packaging Ordinance shall be preserved and completed selectively by such regulative elements that lead to a removal of the biggest recognizable weaknesses.

The mainstays of the Packaging Ordinance are in particular:

- the product responsibility for packaging being realised solely by the private sector
- the residential collection,
- the assignment of disposal services in the competition,
- the requirement of minimum recovery rates,
- the mandatory coordination between municipalities, and the dual systems, the common use of the waste bins and
- the dual systems as innovation drivers and stabilizing factors.

In bifa's opinion there is need for incremental optimizations in form of amendments to the Packaging Ordinance or even better in form of an official Act (what means that it would unfold more legal power than the current ordinance) as well as a nationwide collection of non-packaging waste which is made of the same material as the packaging that are collected today within the Green Dot system.

Concept model "Conversion: Strengthening the responsibility of the local authorities"

Conversion in this conceptual variant means a turning away from last years' trend towards a more product-related disposal responsibility and the shift of specific tasks away from the self-management by private entities towards an enhanced responsibility of the municipalities.

For this reason, the responsibility of the companies that bring packaging onto the market for sorting and recycling of the packaging will be supplemented by an enhanced responsibility of the local authorities.

But this communal responsibility differs between packaging and comparable non-packaging waste, both collected within a common bin. This means that the local authorities are (as it is today) completely responsible for the comparable non-packaging waste, but when it comes to packaging, they are given the permission to invite tenders for the collection of this waste that has been licensed by the responsible companies with dual systems. The operative part of the producer's responsibility for packaging is thus shared between distributors and municipalities: The municipalities are responsible for the collection, the distributors for sorting and recycling (or other treatment) of the packaging. The financial part of the product stewardship remains completely with the companies that placed packaging on the market. Packaging and comparable non-packaging from private households are being collected together in a single container. The collection, sorting and disposing of comparable non-packaging are fully in the responsibility of the municipalities and the cost are borne by the fees that are financed by the households.

Concept model „System interruption: recycling certificates"

The "interruptive" moment of this conceptual variant consists in the substitution of the present system of the packaging disposal (which in form of the Packaging Ordinance mainly refers to the regulatory law) by a highly market-oriented approach. "Packaging certificates" or "recycling certificates" within the meaning of the British PRN system form the core of this model. These tradable licences substitute the present packaging licensing and take-back obligation under the Packaging Ordinance. The packaging certificates are issued by accredited recovery and recycling companies and serve as a certificate that confirms the recovery of a certain amount of packaging waste. Corre-

spondingly, companies that place packaging on the market are obliged to acquire numbers of such packaging certificates according to the extent of their recovery and recycling engagement. Trading these certificates is generally only possible between the obliged companies, intermediaries, recovery and recycling companies and exporters. A certificate exchange could be developed in accordance to other securities trading places. And a suitable supervisory authority takes over the control about all relevant actors and areas.

In bifa's point of view the integration of comparable non-packaging into the certificate system made only sense if there would be ambitious minimum recovery and recycling quotes established.

Realisation of the conceptual variants within a business game

The described conceptual variants represent three fundamental orientations of the packaging disposal with all of them having the potential to meet the forthcoming challenges of a sustainable resources management. With regard to the intended business game the conceptual variants need to be developed through the principal co-defined operationalizations and configurations.

It is suggested to describe the expected material flows as precisely as possible (qualitatively and quantitatively) in both the conceptual variants „Advancing a proven system“ and "Conversion: Strengthening the responsibility of the local authorities" and to simulate effects to the material flows as well as to the involved actors, initially in a theoretical sensitivity analysis.

The concept model "System interruption" is from a market-based and resource economic point of view a desirable goal. Under the present basic conditions in Germany the associated system change occurs not to be very realistic for the time being, particularly because of the legitimate interests of the municipalities, the failings in the execution of regulations by the authorities and the EU wide trend to product-related approaches.

Special optimisation in the sub-system compulsory deposit on one-way beverage packaging

If favouring reusable packaging and the existing deposit collection and recycling system should be kept, which in view of system exit costs also appears economically prudent, the compulsory deposit must be strengthened an appropriate manner. Possibilities exist in complementary or modifying tools, such as a labelling requirement for “ONE-WAY” or “REUSABLE”, a public awareness campaign to promote reusable beverage packaging and the extension of the compulsory deposit to all beverage areas. An expansion to container sizes up to 5.0 litres (currently limited at 3.0l) would only have little effects of quantities and would tend to affect the efficiency and practicality of the system negatively. An additional steering charge or tax on disposable packaging is not recommended (particularly because of deficits in the field of fairness and specifically for reasons of political enforceability).