ANEC

EUROPEAN ENVIRONMENTAL CITIZENS ORGANISATION FOR STANDARDISATION

ECOS

ORGANISATION EUROPÉENNE ENVIRONNEMENTALE CITOYENNE POUR LA NORMALISATION

ANEC2005/ENV/001

ANEC-ECOS Position Paper on the revised Packaging Standards prepared under the second Standardisation Mandate M317

Executive summary and conclusions

ANEC and ECOS have analysed the revised 2004 packaging standards prepared under the second Standardisation Mandate M317 and identified some major shortcomings, in particular:

- The European standard EN13428:2004 (Requirements specific to manufacturing and composition – prevention by source reduction) offers no measurable criteria nor incentive to companies to reduce excessive packaging. In addition, the standard allows for the use of substances that are harmful for the environment.
- The European standard EN 13429:2004 (Packaging – Reuse) does neither specify a minimum number of trips or rotations nor does it contain a test method for the verification of such a requirement. ANEC and ECOS are also very concerned about the inclusion of hybrid systems in the standard.
- The European standard EN 13430:2004 (Requirements for packaging recovering by material recycling) does not define material specific requirements to facilitate recycling nor a minimum percentage of the package that has to be recyclable.
- The European standard EN 13231:2004 (Requirements for packaging recoverable in the form of energy recovery) contains a minimum caloric value, which is, however, much too low. Further, substances or materials that can adversely affect energy recovery have been insufficiently covered.

Conclusions

ANEC and ECOS consider that the standards satisfy neither the essential requirements of the Packaging Directive nor the provisions of the Mandate M317. Only few substantive changes have been made compared to the original standards and most of the changes are purely editorial. ANEC and ECOS are of the opinion that the revised standards will not lead to a minimisation of the environmental impact of packaging.

This said we call upon the European Commission and Member States not to publish them in the Official Journal because this would give them the credibility and status they do not deserve. We accept that this may cause inconsistent application of the intent of the Directive, and therefore we also call upon the Commission to consider alternative solutions to this problem, one of which may be to include specific requirements within the Directive.

ANEC, the European consumer voice in standardisation, represents consumer interests in standardisation and certification. ANEC was established in 1995 and represents consumers from all EU Member States and the EFTA countries.

ECOS, the environmental stakeholder in standardisation, represents 13 member organisations (four European umbrella organisations and 9 national environmental NGOs), which themselves have more than 26 Mio. individual members.

1. Background

A first mandate to prepare standards in the field of packaging and the environment was given to CEN in 1996. The standards intended to give a presumption of compliance with the essential requirements of the Packaging Directive covered the following subjects:

- Packaging - Requirements specific to manufacturing and composition – Prevention by source reduction (EN 13428)
- Packaging - Re-use (EN 13429)
- Packaging - Requirements for packaging recoverable by material recycling (EN 13430)
- Packaging - Requirements for packaging recoverable in the form of energy recovery, including specification of minimum inferior calorific value (EN 13431)
- Packaging - Requirements for packaging recoverable through composting and biodegradation – Test scheme and evaluation criteria for the final acceptance of packaging (EN 13432)

However, two member States, Belgium and Denmark, made a formal objection to these envisaged harmonised standards, pursuant to Article 9(4) of Directive 94/62/EC, indicating that they do not satisfy entirely the essential requirements of the Directive. As a result only EN 13432 on composting was fully recognised and a second mandate was given to CEN.

In 2002, CEN TC 261 prepared a memorandum of understanding concerning the standardisation work pursuant the second mandate related to the Packaging Directive. As it became clear from this document that the packaging industry is not willing to go for a substantive revision of the standards ANEC decided not to actively participate in the work and informed the Commission on this development.

CEN members accepted the revised standards with a great majority. Only Austria disapproved of prEN 13429 on Packaging-Reuse. The standards were published in summer 2004.

2. Analysis of the Revised Packaging Standards

2.1. EN 13428: 2004 “Requirements specific to manufacturing and composition – Prevention by source reduction”

According to our analysis, this standard does not contain any verifiable and measurable criteria for packaging prevention (e.g. a maximum ratio between the volume or surface of packaging and the volume of the packed good). Instead the standard follows an approach similar to that of management system standards (such as the EN ISO 9000 series or an environmental management system such as EN ISO 14001) leaving it to the discretion of industry to determine packaging reductions.

The standard establishes a number of performance criteria (e.g. product protection, packaging manufacturing process, packaging/filling process, etc.) which are determined by the individual or organisation that places the packaging on the market. Under the assessment procedure it is determined whether all performance requirements could have been achieved with a reduced resource input. Reduction at source ranks below all performance criteria including marketing and product presentation in the hierarchy of priorities. It is thus possible, without infringing the standard, to place excessive packaging units on the market by arguing that voluminous packages are necessary for e.g. product presentation. Under those circumstances the notion “prevention” looses its meaning almost entirely. Without clear-cut criteria an enforcement body can only control whether the defined procedure has been followed but will never be in the position to proof that the packaging is unnecessarily big. Such a standard will offer no incentive to companies to reduce their packaging.

The Packaging Directive calls for a general minimisation of hazardous material to the environment in packaging material. The standard 13428 however limits itself to a restricted number of substances or preparations, namely those classified as dangerous to the environment in accordance with legislation and which need to be labelled with the symbol "N". Many potentially dangerous chemicals falling in other danger classes (such as CMR substances) are not even considered. Furthermore, once a dangerous substance for the environment has been identified, according to the standard it must only be demonstrated that the minimum amount of this substance has been used to satisfy the functional requirements. Hence, it is allowed to use dangerous substance for the environment despite the general environmental concerns about the substance. The standard does not encourage the search for an alternative less hazardous substitute. In many cases the manufacturer will use the minimum amount for economic reasons anyway and therefore it could be argued that this standard justifies the continued use of substances dangerous for the environment.

Conclusion on EN 13428: 2004

ANEC and ECOS believe that the standard 13428 does not satisfy the requirement outlined in point 1 of Annex 2 of the Packaging Directive "*that the packaging volume and weight be limited to the minimum adequate amount to maintain the necessary level of safety, hygiene and acceptance for the packed product and for the consumer".* The approach chosen in the European standard 13428 does not respect the key objective of the Directive – the prevention of packaging and packaging waste. In addition, the standard fails to ensure that the requirement contained in point 1 of Annex 2 of the Directive stating “*that the presence of noxious and other hazardous substances and materials as constituents of the packaging material or of any of the packaging components is minimized with regard to their presence in emissions, ash or leachate when packaging or residues from management operations or packaging waste are incinerated or land filled*” is met.

2.2. EN 13429: 2004 “Packaging – Re-use”

According to the standard EN 13429 “Packaging – Reuse”, a packaging is classified as a reusable packaging on the basis of its principal suitability for the purpose. The standard does not contain any provisions on how often a packaging should actually be reused or the intended number of reuse cycles. Furthermore, the standard contains no test method to verify whether a minimum number of rotations have been achieved.

This standard follows a quality management approach similar to the standard series ISO 9000 or ISO 14000. Consequently, the standard does not provide a clear-cut technical specification, but relies on the judgement of the filler whether a certain package is deemed reusable. In the assessment, the filler has e.g. to establish and record that the design of the packaging enables the principal components to accomplish a number of trips or rotations in normally predictable conditions of use. This is a vague statement and it should have been the purpose of a harmonised standard to prevent as far as possible such interpretative assessments.

ANEC and ECOS are also concerned about the inclusion of hybrid systems in the standard. Such hybrid systems would permit to launch a product or product family with two packaging units, i.e. a premium product with lavish packaging being designated as a reusable packaging (although it may actually not reused at all) and the same product with a simple packaging, the so-called refill packaging. The standard does not call for a specific ratio between the number of refillable packaging used and the number of refill packages (auxiliary product). The availability of the refill packages may be also limited (the standard just requires that these packs are “readily” available). The standard allows that hybrid systems, including their one-way elements, may be presented as environmentally beneficial reuse systems although they differ in practice not much from one-way systems.

Moreover, hybrid systems do not correspond to the requirements of the Packaging Directive. Article 3 (5) of the Packaging Directive, which defines "reuse" as follows:

”Reuse shall mean any operation by which packaging, which has been conceived and designed to accomplish within its life cycle a minimum number of trips or rotations, is refilled or used for the same purpose for which it was conceived, with or without the support of auxiliary products present on the market enabling the packaging to be refilled; such reused packaging will become packaging waste when no longer subject to reuse.”

The definition of the term “reuse” in the Packaging Directive calls for multiple filling or the use for the same purpose. The entire range of requirement criteria must be taken into account when considering the purpose of a packaging. If, for example, the primary purpose of a packaging system lies in providing defined sales units and protecting a product during the transport from manufacturer to consumer, this purpose is neither required nor fulfilled when the consumer refills the packaging. In addition, it is difficult to understand that packages accomplish trips or rotations when they stay at home. ANEC therefore calls into question whether hybrid systems are compatible with the definition of reuse as given in the Packaging Directive.

Finally, the standard does not restrict the proportion of the one-way components of reuse systems. This should not exceed a few percent of the overall mass of the packaging system.

Conclusion on EN 13429: 2004

ANEC and ECOS are of the opinion that the standard EN 13429 on reuse does not satisfy the requirement contained in point 2 of Annex 2 of the Packaging Directive that *"the physical properties and characteristics of the packaging shall enable a number of trips or rotations in normally predictable conditions of use*" because neither a minimum number of trips or rotations has been defined in the standard nor has any other measure of durability been specified. Further, the hybrid system cannot be regarded as reuse system and is therefore not compatible with the Packaging Directive.

2.3. EN 13430: 2004 "Requirements for packaging recovering by material recycling"

According to the mandate M317, the requirements for packaging recovering by material recycling shall take into account substances or materials that may adversely effect the recycling process, collecting and sorting and the quality of the recycled material. Instead of defining those criteria, the standard refers in an informal note to CR 13688:2000 "Packaging – Material recycling – Report on requirements for substances and materials to prevent a sustained impediment to recycling" and shifts the task of identifying the problematic substances to the user of the standard. The standard gives no concrete material specific requirements. Instead, the reader is referred to "known, relevant and industrially available recycling technologies". This wording leaves a lot of room for interpretations and is of little help in judging whether a packaging complies with the essential requirements of the Packaging Directive.

Generally speaking the standard is open to a wide range of interpretations. This holds also true for the requirement that "the supplier shall be able to demonstrate that the procedures defined in normative Annexes A and B have been followed in arriving at the final design of the finished packaging such that a certain percentage of the packaging materials can be claimed to be recyclable". This could be 1%, it could be 10% or any other percentage. A minimum percentage has not been defined. The supplier must only declare the percentage by weight of the functional unit of packaging available for recycling, identifying the intended material recycling stream(s).

Another example is the requirement that changes in the production operations shall not "adversely affect the compatibility of the packaging with the specification of the recycling process". Again it is not clear what is to be understood by "adverse" effects. ANEC and ECOS believe that the standard should have defined the parameters that have negative consequences for recycling.

In addition, the standard allows to classify packages as recyclable although the necessary recycling processes are not yet available, provided "that there is a development leading to the availability of industrial recycling capacity within a reasonable period of time". The question is, of course, what is a reasonable time frame? Is it 1 year, 5 years or 20 years? Any interpretation is possible. What happens if the predicted recycling capacities are not available within the envisaged

time frame? Furthermore, the term "industrial recycling capacity" is not further elaborated. Recycling facilities may be commercially available, but nevertheless their capacities may be small compared to the waste production. It is left open what their minimum size would be to be designated as "industrially available".

According to the standard, which follows a quality management approach similar to the standard series ISO 9000 or ISO 14000, it is sufficient to follow the outlined procedure and to document that some consideration has been given to the recyclability of packaging. This does however not mean that a relevant proportion of the packaging is recyclable or that it is really recycled in practice. According to the standard it is possible to argue that a small percentage of packaging (even less than 1%) may be recyclable in 10 years or so and that therefore the package is to be considered as recyclable. Such a statement of course holds true for any material. In other words, to come to such a conclusion no standard is needed.

Different users of the standard might come to very different conclusions with respect to the ability of a packaging to be recycled. The purpose of the mandated standardisation work should have been to give clear-cut answers on the recyclability of packaging. ANEC and ECOS are of the opinion that the CEN report ”Packaging - Material Recycling - Report on the Requirements for Substances and Materials to Prevent Sustainable Impairments of Recycling” could have been taken as a starting point for the development of packaging specific normative requirements.

Conclusion on EN 13430: 2004

Compliance with the standard 13430 does not mean that a packaging is recyclable. ANEC and ECOS members believe that the standard does not satisfy the requirement contained in point 3 of Annex 2 of the Directive that packaging recoverable in form of material recycling “*must be manufactured in such a way as to enable the recycling of a certain percentage by weight of the materials used into the manufacture of marketable products, in compliance with current standards in the Community*”. The standard, however, does not define material specific requirements with a view to facilitate recycling or a minimum percentage which must be recyclable.

ANEC and ECOS are of the opinion that the following provisions of the mandate have not been fulfilled with respect to:

- substances or materials that are liable to create problems in the recycling process;
- materials, combinations of materials or designs of packaging, that are liable to create problems in collecting and sorting before material recycling;
- the presence of substances or materials, that are liable to have a negative influence on the quality of the recycled material.

ANEC and ECOS therefore believe that the requirements of this standard are not able to provide assistance in the judgement whether packaging is recyclable.

2.4. EN 13231: 2004 "Requirements for packaging recoverable in the form of energy recovery, including specification of minimum interior calorific value"

Unlike the standards on prevention, reuse and recycling, this standard EN 13231 contains clear packaging related requirements. However, the requirements are not very demanding. ANEC and ECOS are of the opinion that a minimum inferior calorific value of 5 MJ/kg is far too low. A value of at least 10 MJ/kg would seem to be more appropriate.

Packaging could consist of more than 50% by weight of inert materials and still could be in compliance with the standard. The benefit in terms of energy recovery would be minimal but a lot of ash would be produced which needs to be disposed of. The proportion of inert materials must be limited to a few percent.

The approach used in the standard focuses on the combustion process only. An incinerator does not only deliver energy, it also needs energy for its operation. In addition, energy is needed for collection, sorting, transportation to the incinerator and disposal of the residues. Only if the overall energy balance is positive, then energy recovery is useful. No evidence has been provided in the standard that this is actually the case.

Furthermore, the standard does not incorporate requirements with respect to materials or substances which cause problems during combustion, such as PVC leading to the formation of hydrochloric acid which necessitates a lot of effort to be removed from the exhaust gas and which leads to corrosion of the incinerator.

Conclusion EN 13231: 2004

The requirement of the mandate to provide a specification of the minimum inferior calorific value has been complied with in the standard but the value, according to the ANEC/ECOS analysis, is much too low. Substances or materials that can adversely affect energy recovery have been covered only insofar as it has been stated that these do not constitute a problem . This is a questionable approach. In conclusion, ANEC and ECOS are of the opinion that the standard does not fulfil the requirements as outlined in the Mandate.

Brussels, January 2005